

ECONOMIC PLANNING

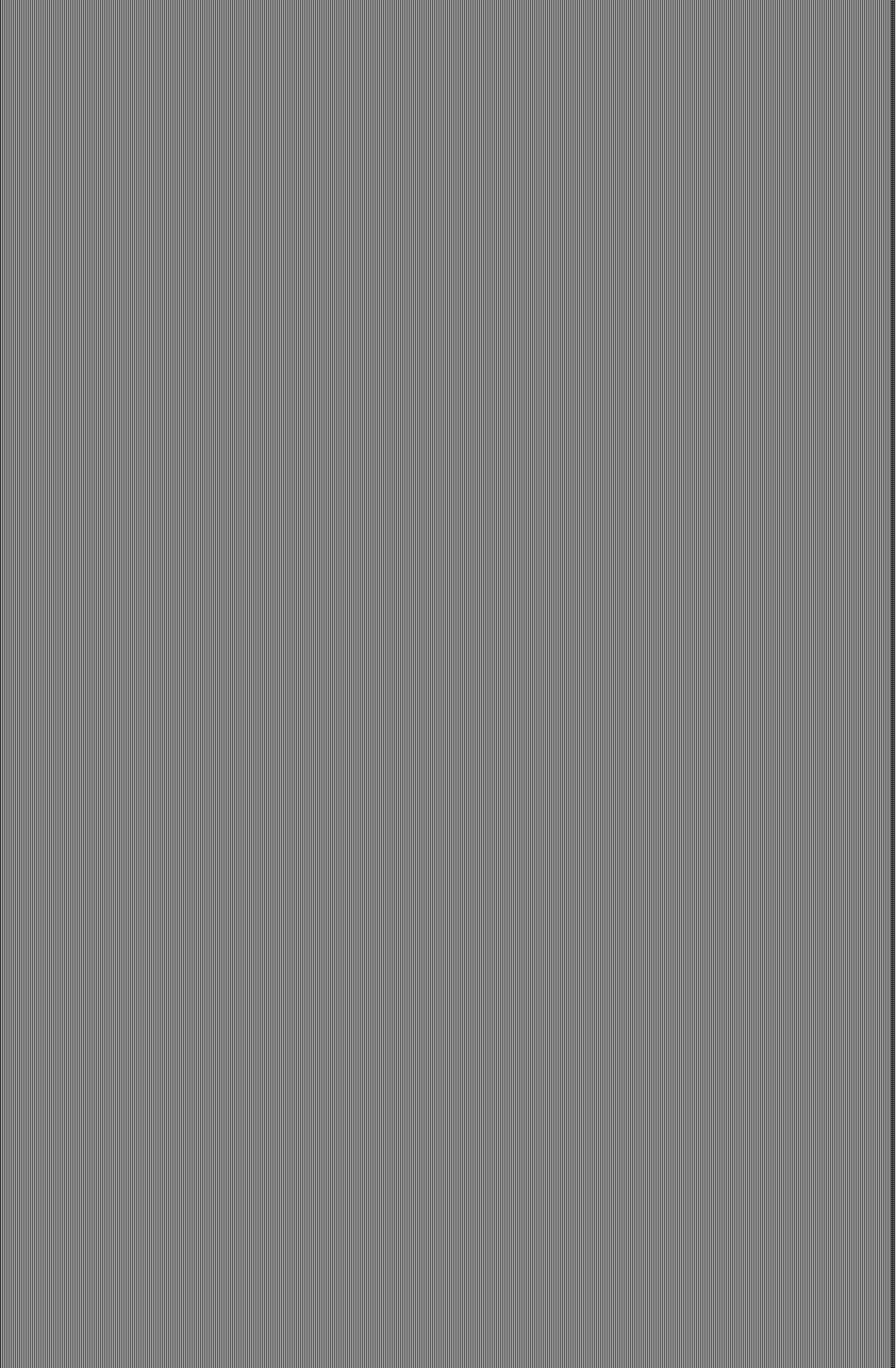
*The Plans of Fourteen Countries
with Analyses of the Plans*

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THE WORLD PRESS LTD.

37 College Street . Calcutta 12



ACKNOWLEDGMENTS

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First Impression—1951

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Published in India by S. Bhattacharjee for The World Press Ltd., 37, College Street, Calcutta 12, and Printed by B. K. Sen at the Modern India Press, 7, Wellington Square, Calcutta 13.

P R E F A C E

TWENTY YEARS AGO, Russia presented her first five-year plan. Her phenomenally rapid rate of industrialization and economic growth in the years 1928-40 (although not so extensive as "official" figures indicated) attracted the attention of all the major nations of the world. Their interest in planning was furthered by the economic distress brought on by the war.

In the United States, there is almost complete ignorance of the planned economy, and the disposition is to dismiss it without examination, on the grounds that planning is un-American or inefficient. At any rate, those who control government or means of communication all too frequently view with distrust the substitution of economic designs for capitalism, which permits the expression of the voice of the people in the market place through the exchange of money of goods and services. Under the capitalist system, the allocation of economic resources is determined by businessmen responding to preferences expressed by 140 million consumers; but under planning the hated bureaucrat may determine what is to be produced and when.

This book stems from an awareness that planning is on the march, and that we should know more about it; that once underlying conditions have suggested its need, putting on blinders will not save us from planning; that an examination of plans throughout the world will reveal their objectives and their manner of operation, and finally will indicate the lines, if ever extension of planning is required in the United States, along which American planning might proceed. Even in peacetime, with the world as it is, we are likely to have to advance on our own planning front; in war, disregard of planning may prove to be a major catastrophe, as our experience in the last war suggests.

In this volume, we present the *essentials* of plans for fourteen coun-

tries, accounting for about one-half of the world's population and three-quarters of the world's income. Planner, capitalist, planner-capitalist, and capitalist-planner—all of these should be aided by having available within the confines of a single volume the essentials of economic planning everywhere. The reader can herein discover the goals of planners, the range of planning in major countries, the degree to which central decisions supplant those of private enterprise, the extent to which the planned economy is compatible with free enterprise, the degree to which it corrodes capitalism, and the manner in which the goals selected are to be reached. The absence of an index indicates the need to examine the plans, if not in their entirety, at least by sections. The detailed Table of Contents should adequately guide the reader to that aspect of the plans or the analysis he wishes to examine.

The plans presented here are the most important now in operation throughout the world. They are chosen not for their recency, but for the degree of planning they reveal. They stress the place of planners in the system; the impact of planning on capitalism; the relative dependence on controls, incentives, and the pricing system; and the allocation of resources to consumption, capital-building, government, and war.

Although it is hoped the reader will himself examine these plans, the editor would ease his task. He has, in some 60,000 words, sketched in the background of the plans and discussed briefly both the theory of planning and the economic conditions which gave rise to the plans. He has also analyzed the various plans with particular reference to their treatment of the problems of full employment, productivity, industrialization and finance, inflation and related questions, and international economic relations. A final chapter is devoted to the progress of the plans. *The plans, however, are the heart of this book.*

I am indebted to Mrs. Margarita Willfort, Miss Lillian Buller, Mrs. Daniel Cheever and Mrs. Anna Thorpe for help with this volume.

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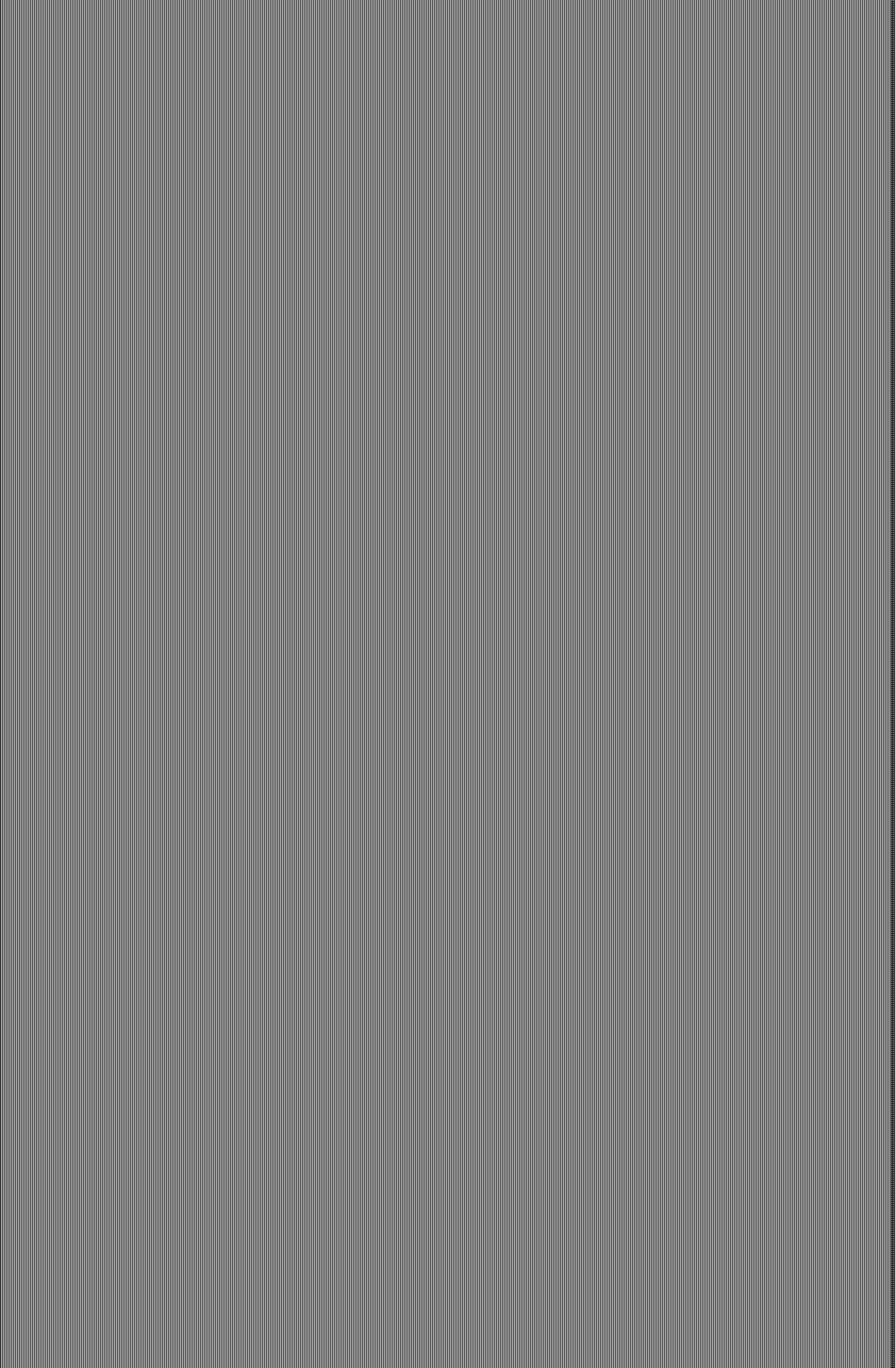
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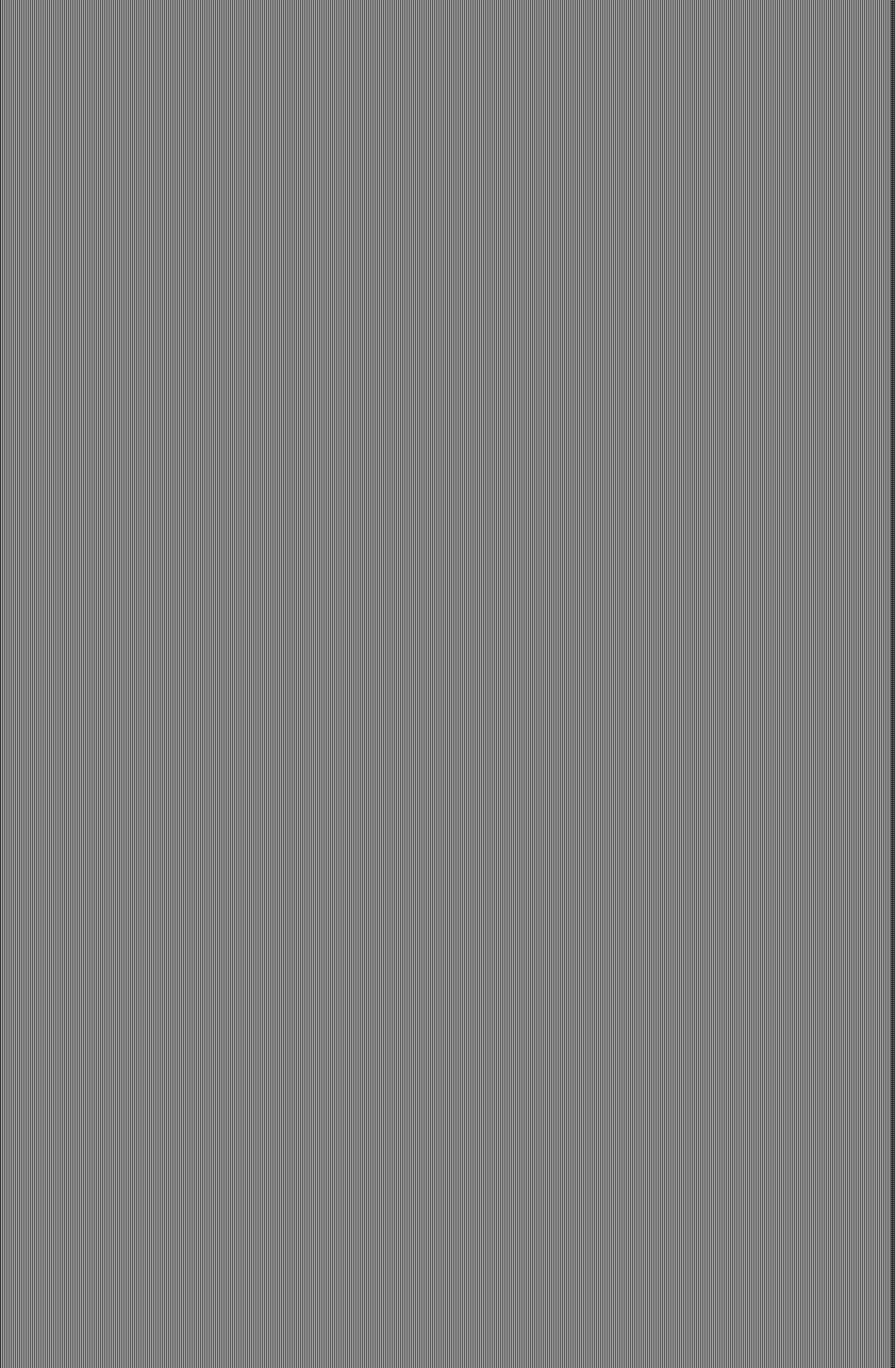


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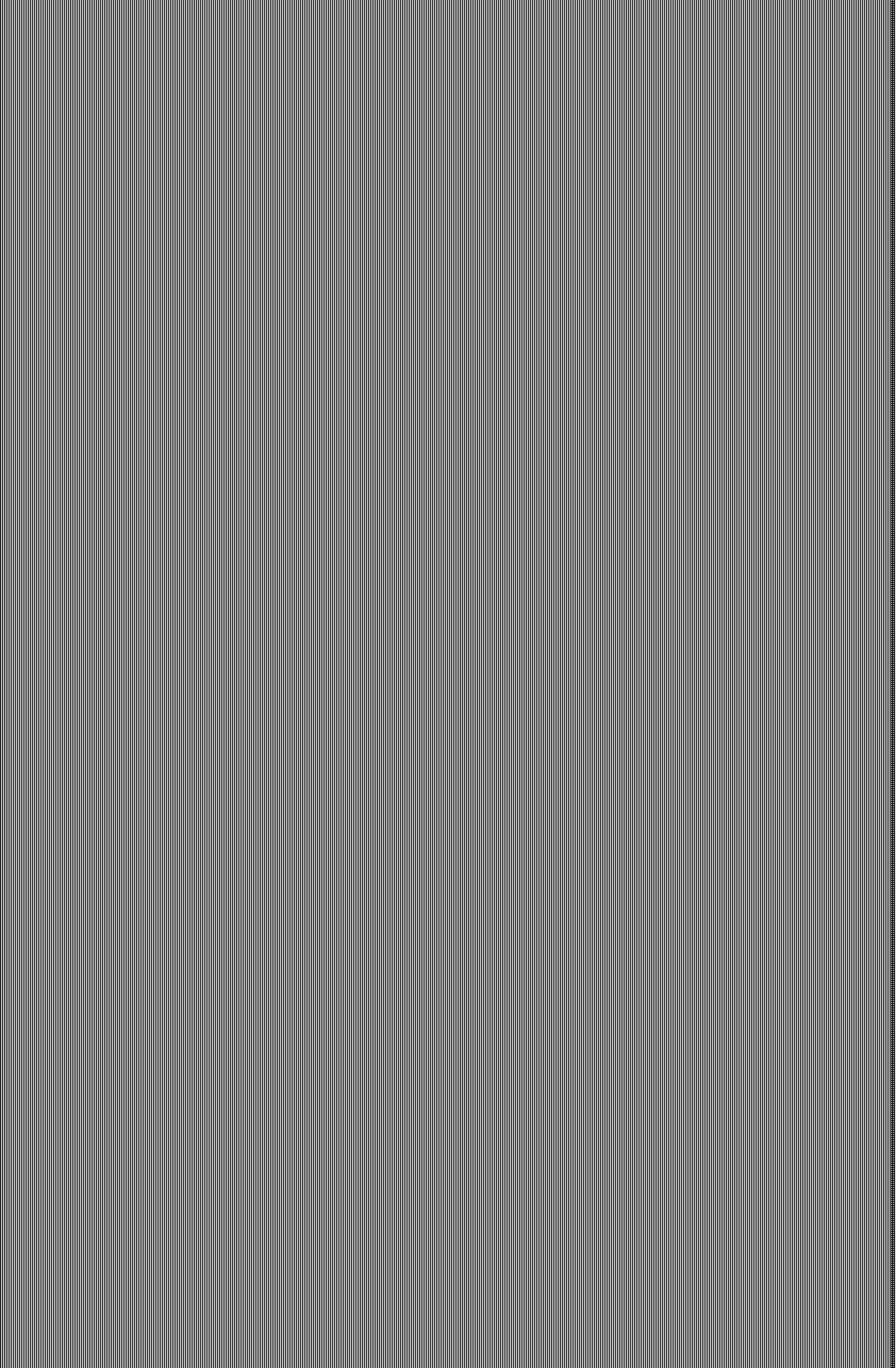
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ECONOMIC PLANNING



Introduction

The Ascendancy of Planning

PLANNING has no place under *pure* capitalism, for it does not allow much room for the capitalist trinity—sovereignty of the consumer, the tyranny of the price system, and the quest for profits.¹ In a planned economy, the economic architects generally determine what use is to be made of limited resources and, therefore, to some extent impair the sovereignty of consumers. Their targets are set according to an objective determined by the state, e.g., producing for war or raising the mass standard of living, and thus do not allow price and income movements to regulate the productive process; and since these goals are selected by the general board of strategy, acting for the party, the government, or

¹ The reader will find an interesting discussion of the compatibility of planning and the sovereignty of the consumer in two excellent books on planning—B. Wootton: *Freedom under planning* (1944), especially pp. 55-78; and C. Landauer: *Theory of National Economic Planning* (revised edition, 1947), especially pp. 16-37. Mrs. Wootton contends that the average citizen does not cherish consumer sovereignty since he (she) is unaware of enjoying this privilege; and that a planned economy, even with freedom of choice, necessarily results in a different output than under a planless economy. For his part, Professor Landauer does not see why democratic planning should compromise on consumers' sovereignty or yield a pattern of output deviating from that given by consumers' choice under an unplanned economy. Yet Professor Landauer shows that the planned society will prefer the future relative to the present more than the individual, and hence will tend to increase savings relative to spending (and reduce consumption); and in a planned society, the over-saving problem can be treated much more effectively than in the unplanned economy (pp. 118-20).

the people, the planned economy supplants the entrepreneur, who is the human magneto in the capitalist machine.

Indeed, some economists try to reconcile planning and capitalism—perhaps the most notable example is Professor Landauer, cited above. Yet, according to Dr. Landauer, the government will vary the proportions between spending and saving, and will clearly reduce risks and contain the role of the entrepreneur. Thus even democratic planning involves serious departures from the capitalist system.¹

In 1913, the planned economy existed only in the minds or scribbles of leftward theorists. As recently as 1930, the average economist reacted violently to the suggestion that a programmed economy might embody some logic. But much has happened since 1930. The world has observed three five-year plans in the USSR effect an unparalleled expansion and industrialization, as well as a strengthening of the military machine. During this same period capitalist countries were undergoing a paralysis or, at the very least, a temporary breakdown of their system, with a proliferation of social diseases: falling prices, unemployment, and obstructions to trade. Then all economies—planned and unplanned alike—experienced war, with its insatiable demand for materials and men, and the consequent pressure to conserve and plan!

Under conditions of the last fifteen to twenty years, few countries could afford to be without at least some degree of planning. Most of their plans were, indeed, of the shotgun variety, and their parallel to Russian planning was not close. Not only did their efforts lack a constructive program based on carefully chosen objectives, but the plans themselves did not even call for *preventive* measures. A simple analogy is the comparison between an attack on the Japanese beetle with a DDT spray gun after the beetle or the nipped leaf has been observed (capitalist planning in the thirties), and periodic sprays of vulnerable trees and plants with DDT in anticipation of the infection by beetles (preventive planning). A general plan, beyond the preventive type, which would operate in marionette fashion, with a central board pulling the strings and yielding a productive and distributive pattern according to preconceived objectives, was far from the therapy used by American and British practitioners. They would patch up the old system, and rely largely on the incentives and rules of capitalism.

With the coming of war, planning on the Russian model came to the front. The woeful ignorance of the war planners concerning Russian experience was to prove costly. Indeed, a number of outstanding theorists and analysts of the Russian system and of other planned economies had demonstrated that such an economy could work,² and others examined the Russian economy in order to discover how it had

¹Landauer, Lange, Lorwin, Pigou, Schumpeter, and Wootton.

worked.³ Still others—while admitting the theoretical possibility of a well-functioning planned economy—were extremely skeptical of the possibility of finding the brains to operate the switchboard of the economy without getting the wires crossed.⁴

It is not my intention to write a learned discourse on the theory of planning. My objective is rather to reproduce the plans and to suggest the background, the essentials, and the similarities and dissimilarities of the plans.⁴ Since writing the above, Professor F.A. Hayek has put together anti-planning theory in his interesting and helpful volume, *Individualism and the Economic Order* (1948). Even more recently Professor A. Bergson has presented a brilliant survey of the literature on planning. In addition to the names mentioned already, he considers the contributions of Marshall, Wright, Pareto, Barone, Lerner, Mises, Dickinson, Taylor, Robbins, and others. According to Bergson, it is necessary to determine ends—e.g., consumer sovereignty, savings and investment, communal consumption, income distribution, provision of military potential.¹ It is also required to suggest the optimum conditions—e.g., are factors combined in every industry in a technologically optimum manner? He also discusses many other vital issues: the administrative problems raised; the competitive solution (with freedom of choice, and with the problems of management, forecasting, rigidities and inequalities of income); the transition problems; the centralist solution with its "Method of Balanced Estimates" under which the Central Board checks planned requirements of commodities and services with planned supplies; and he suggests when the centralist approach may be more helpful than the competitive one.⁵

planning and capitalism
Unfortunately, many who went to Washington in 1940 and later years to operate the war economy were abysmally ignorant of Russian history, and, in particular, of Russian successes and failures in planning. Otherwise, they would have urged the adoption of a general plan much earlier instead of waiting to be forced, step by step and tardily, towards a planned economy. They also could have avoided many errors which the USSR had made in the incipient stages of planning—e.g., instituting a system of priorities for raw materials without an adequate census of total supplies, a priority system for materials not related to the final products required, or a control of prices independent of wage and manpower control. To put into operation a fully planned economy

³ Baykov, Bergson, C. Clark, Dobb, Gerschenkron, Sweezy.

⁴ Hayek.

⁵ A. Bergson: "Socialist Economics" in *A Survey of Contemporary Economics*, edited by Howard S. Ellis, 1948, pp. 412-48. Also see the helpful volume, A. T. Lauterbach: *Economic Security and Individual Freedom; Can We Have Both?*, 1948.

takes time; and blunders and fumbling are likely to accompany any movement towards one. But an awareness of the interrelation of the various parts of the economy, and of the price structure, would have clarified the ultimate objectives; particularly was this true for the businessmen—ordinarily contemptuous of plans and planners—now in the unenviable position of having to organize the allocation of scarce resources and to implement their system by appropriate pricing.

‘Especially since the end of the war, planning has been in the ascendant. Russian experience and influence, the devastation brought on, by war, an impairment of confidence in unplanned capitalism, the planning “know-how” acquired in war, and finally the increased support given a planned economy by writers, theorists, and intellectuals generally—all these conditions help to explain the large advances being made toward a planned economy.

The average European regards unplanned capitalism as a luxury which only a rich country can afford. On being pressed by an American observer for the reasons for the British choice of socialism, the great Liberal, Lloyd George, said that with the large prizes of a dynamic society not open to them, the British could not afford the losses incurred under capitalism.’

Liberty and Incentives

This book is principally concerned with economic issues; and from a purely economic viewpoint, numerous advantages of the socialist state can not be denied. For example, it can achieve a distribution between production of essentials and non-essentials apparently impossible for the capitalist state. Surely, no well functioning planned society would allow expenditures of \$3 billion on education and \$2 billion on social security, as in the United States, in contrast with expenditures of \$7 billion on alcoholic beverages. In its concentration on essentials prior to producing non-essentials, the economy of the USSR has much to recommend it. (However, to change the pattern of expenditures would interfere with freedom of choice.)

In a nation with an economic system like that of the USSR, social criteria may determine the allocation of resources. Its manpower is not dissipated in the operations of selling and distribution—certainly one-half, or even one-third, of its resources does not drift into these channels. Neither does it tolerate the uneconomic level of output, with high per unit costs, which results from the restrictions and waste furthered by monopolistic competition.

‘The USSR is not troubled by excessive salesmen and advertisers, while the factories are short of labor; and unlike British post-war experience, purchasing power is not shunted disproportionately to tobacco,

alcohol, and entertainment. Surely the USSR would not permit a student body of three millions in higher institutions of learning, even though the long-run market demand is not likely to absorb one-half of this number. The Gosplan would determine the numbers required, and through various tests the Commissariat for Culture would make sure that largely irrespective of income and proximity to colleges, the successful candidates were selected according to promise.

'Unplanned capitalism is not *clearly* superior to socialism on economic grounds—and especially when the planned society can capitalize on the early gains made by dynamic capitalism. In this brief survey, I shall not list the well-known advantages of unplanned capitalism. For example, profits are surely an effective incentive; but the planned society also provides incentives for managers and workers. In fact, incentives are universally sought for the Russian workers, whereas American trade unions frequently spurn incentive programs.

'The most serious doubts concerning the planned economy revolve around the issue of liberty; for the planned society still has to prove that it can achieve its economic goals without the loss of fundamental liberties, without the police state, and by the use of incentives (the carrot) rather than compulsion (the stick). The USSR has no freedom of speech, of assembly, or of the press. Compulsory labor seems to be practiced now, although it apparently was relatively restricted until the war period. Once the entire system attains maturity and achieves a high state of industrialization, the freedom to choose an occupation may well be regained. Increasingly it relies on incentives—pay according to results, improved housing to effect a desired redistribution of labor, increased rations for those doing heavy work, production of luxury goods to stimulate the co-operation of high-priced workers. The Russians still have to prove, however, that their planned society can co-exist with the other fundamental liberties.'

'In his discussion in *Full Employment*, Lord Beveridge stressed the compatibility of a planned society and the retention of fundamental freedoms. 'But he was prepared to accept direction of investment, and of labor. \ Post-war Britain at first limited its controls to imports, foreign exchange, licensing of factories, limited price control, rationing, and allocations. A serious leakage of resources to non-essential areas developed, however. With the dollar crisis of 1947, reflecting both a production and a foreign exchange problem, the British extended their controls to labor. Even in the British planned economy, the issue of freedom rises ominously. Is there a stopping point between capitalism and a planned economy, short of complete control by the state and the disappearance of essential liberties?

The world anxiously awaits the results of the British experiment. Americans will be more disposed to accept a planned economy if it is

proved to be practical without serious infringements on liberty. Whether compatible with freedom or not, however, the disposition to accept dictation by a planning board will depend in no small part upon the results achieved by unplanned capitalism, and upon the crisis engendered by the post-war political situation. If the capitalist machine suffers from magneto trouble or if it creaks and groans, those in distress will seek a way out; and to many, bread and housing will seem more important than liberty. (This assumes the masses are free.)

Of this we may be reasonably sure: With the outbreak of war, in its likely proportions, capitalism and liberty will prove to be too expensive a luxury.⁶

Problems of Planning

Americans are not so well informed on planning as they should be. In part, their ignorance stems from a smugness concerning the strength, flexibility, and resilience of capitalism, and in part from a fear that publicity for alternative systems might jeopardize the continuance of capitalism. An additional difficulty is that theorists writing on the planned economy address a small but select audience: they are economists' economists. The ignorance further results from the inaccessibility of the plans—a gap which this book attempts to fill.

It is indeed unfortunate that Americans know so little about the planned economy. In this quasi-war world, a planned society may be just around the corner. Even in a peaceful world, the survival of a capitalist society, an island in a socialist sea, is not probable. Capitalism may well be but a stage in the historical process from feudalism to socialism. Moreover, our present system contains large elements of planning. For all these reasons, we should examine the various plans with a view to comparing the unplanned capitalist system, the capitalist system with some planning, and the fully planned non-capitalist system, so that, insofar as we embark on a planned economy, we profit from the mistakes of other countries which have had more experience with planning.⁷

Types of Plans

Few countries are without plans today. Approximately two-thirds of this volume is devoted to the reproduction of plans which will give the reader an adequate idea of the varying types now in operation. At one extreme is the Five-Year Plan (1946–50) of the USSR, which controls the use of virtually all resources and labor in the country and

⁶ This problem is further discussed in Chapter II.

determines the distribution of resources (1) for investment, on the one hand, and consumption, on the other, (2) for public as against private enterprise, (3) for the production of necessities as against luxuries, (4) for domestic against foreign use, (5) for peace or for war. At the other extreme is the United States which has a plan for achieving and maintaining high levels of employment with minimum government interference. In between, are various kinds of planned and semi-planned economies.

' Czechoslovakia and Poland look Eastward in their two- and four-year plans; they advance towards nationalization, public command over distribution of economic resources, and a partial atrophy of the profit motive. Private enterprise still controls a significant part of the economy, and incentives, relative to compulsion, probably have a larger place than under the Russian régime. Argentina, determined to free itself from the foreign domination which has created high prices for imports and dependence on foreign economies, also moves towards a regimented society; one of its main goals is industrialization.

The British at first (1944) were content to rely primarily on private enterprise; they imposed only those governmental restrictions needed to attain international co-operation consistent with trade stability, and to assure private spending compatible with high levels of employment and adequacy of total spending. Government might indeed offer a mild dose of Keynesian medicine, and, in particular, step in promptly to prevent a small decline from snowballing into a major depression. By 1947, however, a Labour government was prepared to go further. We shall reproduce and comment on later reports.

1 The Netherlands presents an annual budget of resources and requirements; and in the deficient economy of the post-war, it proposes to attain the optimum distribution of its limited resources with the minimum use of controls.' Apparently the work largely of the brilliant Dutch economist Professor Tinbergen, the Dutch "Budget of Resources and Requirements" marks a milestone in the advance towards "capitalist planning." Norway's diagnosis, prognosis, and program, like the Netherlands' budget, marks an important advance; but controls play a large part in the Norwegian plans.

4 France stands midway between the planned society of Russia and the relatively planless society of the United States. Under the Monnet Plan, the French propose modernization, a rise in productivity, concentration on production of crucial factors and materials (e.g., power, coal, iron) and a careful husbanding of scarce resources (e.g., labor, foreign exchange). Compulsions and incentives are both to help attain the objectives for the years 1947-50.

For countries invaded and reduced to a low economic state (e.g., Germany, Japan, and Greece), the problems are somewhat different: the plans emanate from outside, or under external pressure. Serious short-

ages of food and raw materials which paralyze the economies; inflation, the symptom of disease; short-run replenishment of inventories; and improved distribution—these are the problems to be faced.

India is on still another footing. Under the Bombay Plan, sponsored by private interests, emphasis is placed upon industrialization and rising productivity, with an accompanying trebling of income in fifteen years. The planners spread light over the distant goal; but they make no attempt to build the road to it, or even remove the underbrush. Their plan is little more than a statement of objectives, and an exercise in arithmetic.

Plan of This Book

This chapter, as well as Part I, which deals with planning and economic conditions, is introductory. In Part II, we compare and analyze various plans.

Part III of this volume presents plans (and brief introductions) for eleven countries which account for one-half the world's population.⁷ At the present level of printing costs, it was not practical to republish the plans in their entirety; but the essentials are made available: enough is reproduced to indicate the objectives, the manner of attaining them, and, frequently, the philosophy of the planned society. For the most part, the analysis is included, the details omitted.

As safe generalization from Part I is that enthusiasm for planning varies inversely with the deterioration of economic conditions. In separate chapters, in Part II, we analyze the plans from the viewpoint of their treatment of full employment, productivity, industrialization, inflation, and international economic relations.

In short, this volume consists essentially of the plans themselves, which require about two-thirds of the space, and their analysis, which consumes one-third. Those who want to learn about planning now will have at their disposal the essential parts of the *Monnet Report for France*, the *Fourth Five-Year Plan of the USSR*, the intriguing *Bombay Report for India*, the White Paper of the British Coalition government on *Employment*, and the Socialist government *Economic Survey of 1947*, the crucial *Two-Year Plan of Czechoslovakia*, and the *Four-Year Plan for Poland*, the interesting *FAO Report on Greece*, and the technically brilliant *Budget of Resources and Requirements* for the Netherlands and Norway, the highly descriptive *White Paper for Japan*, and the State Department *Survey of the German Economy*. In addition, in the course of our analysis we also consider some aspects of Swedish, Belgian, Australian, Canadian, and South African plans, and include

⁷ In addition, brief excerpts or (and) comments are presented for Australia, Canada, South Africa, Sweden, and Belgium.

some relevant material for the United States, and part of the British Four-Year Plan, 1949–1953.

Those who will take the time to read the plans and the analyses, will, I am sure, have a better understanding of the planned economy: they may examine the capitalist economies with minimum elements of planning, and, one after another, economies with increased elements of planning. /The road from capitalism to planning is marked (in order) by signposts for Canada and the United States, India, Australia, Netherlands, Norway, the Argentine, France, Czechoslovakia, Poland, and, finally, the USSR, Germany, Japan, and Greece are side roads, with their connecting links to the main artery not clearly defined./

Part One

ANALYSIS

Elements of Planning

Allocation of Resources under Capitalism

SPACE precludes more than a brief and elementary treatment of planning. The reader who wishes a full discussion of the problems involved should consult the books referred to in this and the preceding chapter.¹ That Americans know so little about the planned economy is not to be explained by the failure of a number of distinguished writers to urge consideration of the problems.

I start with a few obvious remarks. ^APlanning is part of the life of all of us. The housewife plans her budget and allocates her time; and the business man similarly budgets his time and resources. Planning is not new in American official life. Surely, Hamilton's plan for developing manufacturing was an early proposal for a planned economy; and there have been numerous plans in American history even before the New

¹ *Inter alia* the reader should consult B. Wootton: *Plan or No Plan* (1935); G. B. Galloway and Associates: *Planning for America* (1941; the bibliography in this volume is extensive and excellent); L. L. Lorwin: *Postwar Plans of the United Nations* (1943) and *Time for Planning* (1945); C. Rodgers: *American Planning* (1947); C. Merriam on "Planning" in S. E. Harris: *Saving American Capitalism* (1948; see particularly references given there); L. Robbins: *Economic Planning and International Order* (1937). This is by no means an exhaustive list. Finer, Gauss, Lerner, Lippmann, Ezekiel, Cole, Coyle, Soule, Mumford and various authors of the National Resources Planning Board are among distinguished writers who have analyzed the problems of planning. In this country, Merriam, Lorwin, and Galloway especially should be singled out for their contributions over a generation to the clarification of the problems of planning. Cf. also the Bergson article, *op. cit.*, for the main advances in the theory of planning.

Deal, by the introduction of the National Resources Planning Board, accelerated the movement to plan.

Planning before the introduction of the Economic Budget of 1946 was, however, sporadic and limited. As one observer noted, New Deal planning was remindful of Don Quixote jumping on his horse and riding in all directions at one time. Characteristic of the plans introduced in this volume is the interest in the economy as a whole.

Before turning to some aspects of planning, we should make some general comments on planning. 'It is possible to plan for a capitalist, a socialist, or a fascist state; and, in fact, all types of government indulge in planning—note in this volume plans for this country, for the USSR, and for the Argentine. Planners necessarily have to suggest objectives, policies to achieve them, and various checks to assure that progress is being made towards the selected goal. This goal may be a class-less society with fair distribution of goods and non-wastage of resources; or it may be a mobilization of resources for war and for favoring privileged classes. It is not necessary to have a completely planned society or no planning at all. Limited planning objectives are quite common; even planning in the USSR is not all pervasive.' Those who are fearful that government might deprive them of special privileges are in no small part responsible for the all-or-none myth about planning. An American business man who would call in an architect to plan the addition of an extra bathroom costing \$2,000 will nevertheless insist that our \$230 billion economy should be planless.

It is necessary to distinguish various types of planned economies. In this volume, for example, we present plans by the British Coalition and Labour governments. These plans set up objectives and means of achieving them. 'Yet Great Britain until very recently did not have a planning organization to plan, to integrate, and to check progress. Planning was, moreover, largely of the blueprint variety, with little attention given to achieving objectives other than proposals for legislation and guides for the civil servants responsible for selective controls. The USSR, on the other hand, provides for the allocation of most economic resources, an allocation based on careful statistical investigations and accounting; and also is prepared to adapt the plan to changing conditions. Production control is the substance of the Russian plans; but through wage, price, tax, and intermittently, rationing programs, the government also assumes large responsibilities of distribution.

'In a planless society, consumer demand largely, if not exclusively, determines what is produced. Consumers' sovereignty is the cornerstone of the system; and it is the task of the producer to anticipate the needs and desires of the consumer. Indeed, in some respects, consumers' sovereignty is a mirage. Producers, in quest of markets large enough to yield small-unit costs, and of a differentiation of product which will

capture a significant part of the market for them, will often deprive the consumer of his free choice; instead, he will have to buy one of the half-dozen leading brands of cigarettes, automobiles, or soap. Were he not influenced by the selling antics of modern business enterprise, the consumer would have a very different spending pattern,² and a genuine differentiation of products would exist. Actually, he pays more because the producer and seller, by imposing a semblance of differentiation, reduce output below the optimum level and thus raise unit costs. Should the consumer, on the other hand, achieve absolute freedom of choice, there might result a proliferation of genuinely differentiated products and a rise of unit costs.¹

Consumers' sovereignty, impaired as indicated above, nevertheless is a dominant element in the planless society, and not, as we shall see, a negligible factor in even the planned one. In a capitalist economy, it largely determines not only the allocation of economic resources, but also, within the limits set by resources and biological factors, the total amount of resources made available. Businessmen, indeed, make the decisions concerning the quantity to be produced, the distribution of output among capital and consumption goods, and among the sub-species of both; to some extent they determine the quality of the items to be produced.¹ They are, nevertheless, servants of the consumers—with the reservations noted above. In addition, the government to some extent protects the consumer from dishonest producers and sellers, and from himself, insofar as commodities he desires might be harmful.

Why Planning Has Advanced

Why, it may be asked, has planning become not only respectable, but also fashionable? Why is there scarcely a country without a plan of some kind? Surely, the success of the USSR is part of the explanation. Three successive five-year plans, dramatically announced after 1928, attracted the attention of the outside world. As Russian production rose dramatically while the American economic machine groaned and creaked and the British and French systems bogged down, inquiring minds began to look Eastward, rather than Westward, as they had in the twenties. Pilgrimages of businessmen and intellectuals to Moscow became as fashionable in the thirties as similar trips to New York and Detroit had been a decade before. Russian successes, indeed, were not so great as official figures might suggest, for there is an upward bias in their statistics. They were striking, nevertheless, in the rise of output, of productivity, and in the rate of industrialization. No country had ever

² Cf. B. Wootton: *Freedom under Planning*, Ch. iv. Mrs. Wootton shows here the relation between prices on the market and prices as determined by free consumers' choice.

experienced so rapid a transformation from a backward agricultural state to a modern industrial power. Even if, as Professor Schumpeter suggests, the proper comparison is not with the Czarist regime of 1913 but with the Czarist regime as it would have been in 1940, the progress would undoubtedly have seemed remarkable. It is clear that a planless society in Russia would not have achieved nearly so much had progress not exceeded that of the generation or two preceeding the Revolution. A large part of the credit should, of course, go to capitalism, for the USSR showed little reluctance in borrowing capitalist techniques and technicians.³

Failures of capitalism, which in the thirties were emblazoned on the front sheet of every newspaper and on the minds of every citizen, likewise led to a rising interest in planning. Economists and men of action had long since abandoned Adam Smith's thesis of the "Invisible Hand" which makes the interest of the entrepreneur and society one. Monopoly and restriction of output, tariffs, exploitation of labor and consumers—these and other abuses had become too frequent for Smith's dictum to be regarded as tenable.

The world-wide depression which began in the twenties in some countries, and in 1929–30 in this country, was the catalyst which precipitated serious doubts concerning the advantages of a planless society. Among the symptoms of economic diseases were insufficiency of demand, monetary contraction, depreciation in the value of capital assets, shattered world trade, collapse of domestic markets, and, with all of these, falling prices and rising unemployment. Having recourse first to deflationary measures, men in authority showed little capacity to pull their countries out of the quagmire of depression. Only when they changed their strategy and relied on expansionist measures were they able to ameliorate conditions. Monetary expansion (and, where required, exchange depreciation), falling rates of interest, public spending—these were the unorthodox approaches to a reversal of economic conditions; and they had a substantial measure of success. Experience in the thirties, in particular, showed that in a world of rigidities it was suicidal to rely on price and wage flexibility and the automatic functioning of the gold standard, the foundation stones of capitalism.

War and its accompanying destruction made planning even more popular. During such a period a country must learn how to conserve resources and how to allocate them. With the end of war, maximum use must be made of limited resources. In order to replace destroyed capital goods, to catch up on maintenance, to ration depleted foreign exchange, and to obtain a fair distribution of the limited supplies avail-

³ On the upward bias and inadequacy of Russian statistics, see symposium on "Appraisals of Russian Economic Statistics" in *Review of Economic Statistics*, Nov. 1947.

able for consumption, it is necessary to plan and to allocate. With the rapid depletion of scarce natural resources, in part a result of war, the urge to conserve and allocate increases.

This brief survey suggests the reasons for the spread of planning. Russia's experiences, the partial breakdown of capitalism in the inter-war period, and the aftermath of war are the more important explanations. Undoubtedly, the theoretical advances in planning economies offered by Lange, Taylor, Schumpeter, Dobb, Lerner, Lorwin, Sweezy, and others had some influence.

Freedom and Incentives

Many view the spread of planning with alarm. Professor Hayek's *The Road to Serfdom* reflects this fear. In his view, planning is the road to serfdom, as German and Italian experience attests; planning and freedom are incompatible; and there is no stopping place short of a completely regimented society. Lord Beveridge, on the other hand, in *Full Employment in a Free Society* envisages a planned economy in which the essential liberties of man are preserved. Time will tell whether Hayek or Beveridge is right.⁴ Surely, Hayek's analysis suggests that he has fallen into an elementary error of logic; for the fact of concomitant variations (e.g., planning and fascism in Germany) does not prove that planning brought fascism any more than the concomitance of marriages and the appearance of ants in June suggests a causal relation. On the other hand, in the Russian state, in which planning has reached its fullest development, freedom is largely lost, even if, as Dobb contends, compulsory labor in pre-war Russia has been the exception rather than the rule. The price of a completely planned economy there seems to have been a substantial loss of liberty. It is not clear, however, whether impaired freedom can be considered a result of poverty, or of the planning which poverty and destruction made imperative. Would the USSR have had to restrain freedom as much if they had an income per capita equal to that of the U.S.A.?

In post-war Britain, planning has reached a moderately advanced stage. Essential liberties are retained. It remains to be seen whether price control, rationing, and allocation in markets for scarce and essential commodities are compatible with the freedom of workers to choose their

⁴ The reader will find the issues discussed well and fully in H. Finer: *The Road to Reaction* (1946), C. Landauer: *Theory of National Economic Planning*, Ch. VII, and B. Wootton: *Freedom under Planning*, especially pp. 137-57. These authors discuss the arguments raised against planning by Professor Hayek, and in particular the latter's emphasis on the Rule of Law, the unwillingness to delegate authority increasingly to administrators, the inability to pursue a consistent and planned policy since there is no agreement on ends among the opposing parties, and the relation, generally, of planning and liberty.

occupations, a strategic liberty. Clearly, price control of essential commodities has led to high prices and profits in non-essential markets; scarce labor and resources have, naturally, shifted into these locales, e.g., entertainment, hard liquor, tobacco. The crucial issue is whether in the depleted economy of the late forties and early fifties, the British can establish the required allocation of resources and distribution of consumers' goods with the aid of a truncated system of controls, or whether the government will gradually have to assume supervision of the movement of labor, to regulate investment, and to allocate not only coal, strategic imports, power, and iron and steel, but hundreds of additional items. The crisis of 1947 dramatized this vital issue.

Whether planning on a substantial scale is compatible with liberty will depend largely on the use made of incentives. Even in the USSR incentives are an important stimulus for attaining the desired movement of labor and high levels of output. There the profit motive for *workers* and *managers* is by no means ruled out. In the planned economy which also cherishes freedom, wages will undoubtedly be adjusted in a manner to achieve the desired occupational and regional distribution of workers, and to stimulate additional output. Wage, price, allocation, and rationing controls, supplemented by a differential tax system, should yield the optimum distribution of workers and capital, given the objectives of the government. By reducing consumer prices, increasing rations, raising wages or reducing taxes—or any combination of these four—the planner can surely rely primarily on incentives to attain the co-operation of workers.

It is well also to remind those who regard every control—irrespective of the seriousness of underlying shortages—as a major threat to our liberties, that even in the United States there are serious infringements on liberty. The eminent philosopher Professor Whitehead reminded us of this in his last book.⁵ The consumer's freedom to choose goods is seriously impaired; and the potential worker has little choice but to accept employment on the terms offered by industry. /

Planning in the USSR

In the USSR, the economic plan has reached its highest state of development. It is obviously a substitute for that allocation of economic resources which in a capitalist system is determined by prices and incomes, and related in turn to consumers' sovereignty and decisions made by innumerable businessmen. The state, through its Gosplan, determines the outlines of the production plan, basing its principal decisions (assuming a given volume of resources) upon the broad objectives of the society, or the Politburo. What resources should be allocated for con-

⁵ A. N. Whitehead: *Essays in Science and Philosophy* (1947), pp. 158-9.

sumption? for capital? for government, inclusive of war? Within each category, the state will have to make significant choices: whether to concentrate on essential consumption goods or to provide semi-luxuries as a spur to intensified efforts; whether to produce capital goods which will yield consumption goods soon or in the long distant future (e.g., weaving machines or improved transportation); whether the government should devote its resources primarily to education, recreation and other peaceful pursuits, or war.

Obviously the major task of the planner is to make the fullest utilization of resources, given the objectives of the state. This means that all the resources should be used (though, of course, excess capacity cannot be ruled out even in a socialist state), and that the various sub-plans should be meshed. The plans for raw cotton production should lace with those for weaving and those for clothing. In turn, the plans for producing clothing from the raw material stage to the final product should be consistent with all other plans which compete for limited resources common to them all: labor, transportation, power, management, foreign exchange. In the French Monnet Plan, for example, attention is focused on those factors common to all industries which, if curtailed, would seriously depress output.

For efficient functioning criteria must be observed. Coupons which cannot be validated should not be given out for scarce materials—as was so frequently done in the early years of Soviet planning, and in the United States, particularly in 1942-43. Production and distribution must be so timed that both raw materials and finished products are forthcoming when needed. In the manufacture of complicated machinery, this synchronization relates to thousands of items. Should improper timing occur, idle factories will result from delayed deliveries, and inventories will be hoarded; a maldistribution of scarce items is inevitable. In the USSR idle factories and hoarding of inventories plagued the planners for many years. In the American war economy, it was discovered that when a priority system, which was soon marred by an excess of grants over supplies, was supplemented by an allocation system, a time schedule had to be followed most carefully. Otherwise, the manufacturer of landing barges who would need copper in 1944 might get his supply before the ship manufacturer who would require it in 1943.

In a completely planned society, the government will allocate all resources. There will be no excesses and no deficiencies. When supplies are temporarily excessive, labor and capital will be withdrawn in favor of deficient areas. It is, of course, possible to germinate a plan under which a small number of vital items are under allocation. Without these items—e.g., power, factory space, iron and steel, copper—production is not likely to proceed far. The American war economy depended in the early years on this type of limited control; and the British economy

of 1947, with its concentration on licenses for factory extension and imports and limited allocation of scarce supplies, supports a partly planned economy. The weakness of this type of planning is that resources may be wasted insofar as producers need not use the strategic items. Consider the wastage of manpower in this country in war by industries which were able to find substitutes for commodities under allocation and in service industries. Similar losses were discernible in Britain in 1947.

Having determined what is to be produced and what is to be made available to attain the goals, planners are then confronted with the problem of making the most of limited available resources, that is, they seek the maximum productivity. Obviously, they will allocate scarce resources in accordance with the priorities of the plan, not primarily according to the prices bid for the finished products. Managers and workers will receive compensation in currency; the compensation will vary with results attained and wages required to elicit the necessary supply of labor. (This is on the assumption that the planners do not have recourse to compulsory movements of labor.) Payments in money will enable the workers to exercise a limited consumers' choice, the planners in turn readjusting output of consumer goods in accordance with the selections made. Obviously, architects of the plan will not rely exclusively on the dictates of the consumers. They will not divert scarce domestic resources from essentials to non-essentials merely because consumers express a preference for the latter; nor will they divert restricted imports.

In a perfectly planned economic society, the money income paid out would equal the total sales price of the goods made available. Planners may well attempt to achieve this Utopia. Confronted with large needs for capital and war, and therefore paying out more in income than they make available in consumers' goods on market places, they seek to achieve a balance in various ways: by adjusting prices upwards; by subtracting income through sales of securities and taxes, particularly by the turnover tax, and thus raising prices indirectly; by protecting the consumer through low prices for rationed commodities and at the same time sterilizing excess purchasing power. An ideal system would, as Professor Pigou suggests, yield incomes equal to the sales value of goods made available. But the Soviets find it necessary to pay high money wages even if part cannot be validated on commodity markets.

Incentives are an integral part of the system. In the Russian economy, the incentives consist of extra money payments in response to additional output; the provision of additional consumers' goods which will make possible the validation of at least part of the excess money disbursed; price differentiation, with strategic workers favored by reduced prices; rationing, in part adjusted to the output of the worker; a distri-

bution of the excess of price over cost which provides an inducement to reduce costs.⁶

Planning in the United Kingdom ⁷

Planning has had its longest history in the USSR, and we discussed this episode in a separate section. Next we consider attitudes towards planning of other countries, including those more or less in the capitalist, socialist, or Communist orbit.

Even under the Churchill government, considerable progress had been made in Great Britain, as is evident by a perusal of the White Paper on *Employment Policy* (1944). In the transition, government action was to forestall, as far as possible, the dangers of patches of unemployment, inflation (excess of demand over supply), and misguided concentration of resources as viewed from the national viewpoint.⁸ The government was prepared to contribute to price stability by using subsidies; to control the use of capital in order to regulate the flow and direction of investment; and to set up a system of priorities, to be enforced by licenses, allocation of raw materials, and some measures of control over the labor and staff required for industry.

The balanced distribution of industry and labor is an objective which the government would indeed keep in mind. By influencing the location of new enterprises in order to diversify the industrial composition of areas vulnerable to unemployment, by removing obstacles to the movement of labor, and by providing training facilities, the government would deal with the problems of local unemployment.⁹

In the longer run, the government was determined to do what it could to maintain total expenditure, and in particular to step in at an

⁶ For a theoretical discussion of the issues involved, see especially A. C. Pigou: *Socialism Versus Capitalism* (1937), especially, Chs. 3-7; M. Dobb: *Soviet Planning and Labor in Peace and War* (1943), especially Chs. I-III; O. Lange and M. Taylor: *On the Economic Theory of Socialism* (1938); J. A. Schumpeter: *Capitalism, Socialism and Democracy* (1942), especially Part III; P. M. Sweezy: *The Theory of Capitalistic Development* (1942), pp. 53-4; and the books by Wootton and Landauer discussed earlier.

⁷ Sir Oliver Franks (*Central Planning and Control in War and Peace*, 1947) presents a strong case for planning in Great Britain. Danger of war, fears of unemployment and scarcities of resources, in his view, make planning imperative. Planning means management of business, the making of policy decisions, the statement of objectives for all to know. The Ministry becomes the general staff and business the army in the field, with the army operating largely by agreement, not compulsion. In order to plan effectively, it is necessary to have facts and to control the evolution of the plan.

⁸ See *Employment Policy* p. 7.

⁹ *Ibid.*, pp. 11-12.

early stage of a decline. It would be necessary to keep up exports, limit dangerous swings in private investment, support public investment (though the government was not too optimistic concerning the results of increased public investment), and to stimulate consumption when necessary—for example, through adjustments in payroll taxes.¹⁰

The authors of the White Paper on *Employment Policy* concluded as follows:

The government believe that, once the war has been won, we can make a fresh approach, with better chances of success than ever before, to the task of maintaining a high and stable level of employment without sacrificing the essential liberties of a free society. . . . In framing these proposals the government has in mind the more general aim of securing for the nation the most effective use both of its manpower and of its material resources. . . . The government, therefore, seek to achieve both work for all and a progressive increase in economic efficiency of the nation, as joint elements in a growing national power to produce, to earn and to enjoy the fruits of increased well-being.¹¹

Two and one-half years later, the British Labour government published its White Paper, *Economic Survey for 1947*. In this document, the government was more articulate than the Coalition government had been concerning the place of planning in the British economy. The aim of the economic budget is to relate needs to resources, as given by a budget of manpower, national income, and expenditures. Subsidiary budgets (e.g., foreign exchange, investment, fuels) must be drawn up, each of which should fit into the pattern of the income and manpower budget. Facts are essential, as was pointed out in the White Paper on *Employment Policy*. Resources can be assessed and needs formulated; planners can then prepare the economic budgets “which relate these needs to our resources, and which enable the government to say what is the first use for the resources in the national interest.” It is necessary to have a number of methods, “the combined effects of which will enable the Government to influence the use of resources in the desired direction, without interfering with democratic freedoms.”¹²

Obviously, looking back, these budgets will be balanced—the nation cannot use more resources and manpower than are available. What is crucial, however, is the manner of use. Are resources to be frittered away in building race-tracks and producing cosmetics and battleships? Or is England to have housing, exportable chemicals, and machinery? Even at this time, in order to assure the most effective uses, the govern-

¹⁰ *Ibid.*, pp. 20-4.

¹¹ *Ibid.*, p. 28.

¹² *Economic Survey for 1947*, pp. 5-6.

ment would license capital issues, new factory buildings, and imports, and ration resources in short supply.¹³

Both reports of the British government—even that of the Coalition government—would commit the government to maximum employment, the best allocation of economic resources as viewed from the national interest, and rising productivity. As might be expected, the Labour government, in supporting a national budget, would go much further than the Churchill government in seeking the fulfillment of the objectives. By early 1948, however, though the government had a planning department, it still lacked an over-all plan. At that time, however, the government announced targets; and at the end of the year had published a one and a four year plan, thus advancing further towards a planned economy.

Planning in the United States

American authorities were much more cautious, as an examination of the Employment Act of 1946 will reveal.

The Congress hereby declares that it is the continuing policy and responsibility of the federal government *to use all practicable means consistent with its needs and obligations and other essential considerations of national policy, with the assistance and cooperation of industry, agriculture, labor, and State and local governments*, to coordinate and utilize all its plans, functions, and resources for the purpose of creating and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing and seeking to work, and to promote maximum employment, production, and purchasing power. [Ital. mine]

The President shall transmit to Congress . . . after the beginning of each regular session (commencing with the year 1947) an economic report . . . setting forth (1) the levels of employment, production, and purchasing power obtaining in the United States and such levels needed to carry out the policy declared in Section 2; (2) current and foreseeable trends in the levels of employment, production, and purchasing power; (3) a review of the economic program of the Federal Government and a review of economic conditions affecting employment in the United States or any considerable portion thereof during the preceding year and of their effect upon employment, production, and purchasing power; and (4) a program for carrying out the policy declared in Section 2, together with such

¹³ *Ibid.*, pp. 4-9.

recommendations for legislation as he may deem necessary or desirable.

Planning under the Employment Act of 1946 is carefully circumscribed, as an examination of the italicized passages will suggest. In the light of the comments and reports which preceded the Act, the interpretation is that controls generally were not to be used to attain objectives; and that, in fact, no policies unfavorable to the continued good health of free private enterprise were to be countenanced—and these include not only controls, but significant reliance on public spending. It is no wonder, then, that the Council of Economic Advisers and the President concentrate on exhortations to business to reduce prices and raise wages, to Congress to grant foreign credits, to set minimum wages, to keep taxes up, and to put teeth in the anti-trust legislation. In the January 1948 *Report* to Congress, the President did present both short- and long-run programs, and as we shall see, the 1949 reports of the President and Council marked advances.

A Budget for the Netherlands

The Central Planning Bureau of the Netherlands offers one of the most interesting plans. Starting with a global plan, the authors present overall budgets for 1947 to 1950 and various detailed plans. They attempt to discover what will be available, and the demands likely to be made upon the resources by consumers, enterprises, and government. To assess the resources, the planners must estimate labor supply, productivity, exports, imports, reparations, current consumption of capital, *inter alia*. In estimating the allocation of resources, the economic architects have to make assumptions concerning military expenditures, civil service personnel, funds to be spent on building, inventories and other capital purposes, and amounts to be made available to consumers.

Little is said about controls or means of attaining a balance between supply and demand. Rationing of scarce items is to be the main weapon of the government. Indeed, the Planning Bureau's powers are limited, and, of course, its plans are subject to approval by the Ministers.

This plan is to be drawn up at regular intervals for the purpose of co-ordinating the government policies in the economic, social and financial spheres. . . . the plan should contain (e.g.) groups of figures relating to the volume of production aimed at, the expected price level and its presumable trend, the national income and its components, the spending of that income, and all further items of importance for the purpose indicated. The Central Economic Plan should, therefore, consist of a harmonious complex of estimates and directions.¹⁴

¹⁴ *First Memorandum on the Central Economic Plan* (1946), p. 5.

Planning Elsewhere

As might be expected, the Polish plan embodies all the detailed plans, and sets up guiding principles for all branches and sectors of the national economy, plans of each sector, and the objectives. The State sector functions according to plans issued by State authorities; the co-operatives, according to the guiding principles of the plan; and the "private sector functions within the limits fixed by legal acts, and its activity is based on economic policy, following on the guiding principles established by the National Economic Plan."¹⁵

According to the French Monnet Plan, co-ordination is absolutely necessary to prevent one sector from arresting the growth of another. It is no simple assembly of partial plans; rather, it aims to integrate objectives and means, and is subject to constant revision and control of the Executive. It applies to both public and private sectors, and is a plan of orientation as much as of direction.^{15a}

Planning on an International Scale

In 1947, a full-scale economic crisis enveloped Europe. Its origin lay in a serious crop failure, in a fuel shortage, in scarcities of other essential items; its symptoms were rising wholesale prices, growing fiscal deficits, and dollar shortage. In order to cope with the crisis and respond to the invitation of Secretary Marshall to help themselves, a sixteen-nation conference was held in Paris July-September, 1947.

Their task was to take a census of supplies and requirements, to estimate deficiencies, and suggest the manner of coping with the latter. Obviously, it would be necessary to raise production, to rely, temporarily, more on foreign sources of supply, and insofar as these measures failed to fill the gap, to cut consumption from existing low levels. In order to raise output, the sixteen countries would require large imports of food—for without adequate food, labor would mangle and high levels of output could not be attained; additional supplies of fuel—for without an increase of fuel, industry would not operate on all cylinders; and equipment, machinery and raw materials, without which a high level of output could not be achieved.

Planning on an international scale did not go much beyond finding out what was available and what were minimum needs, and setting up goals for a period of four years. The Conference announced plans to bring grain production back to pre-war levels, coal one-third above pre-

¹⁵ *Polish National Economic Plan*, p. 7.

^{15a} *Rapport Général sur le Premier Plan de Modernisation et d'Équipement*, pp. 21-2.

war, electricity output two-thirds above pre-war, crude steel two-thirds above pre-war.¹⁶ In power, for example, productive capacity was to rise from 27.8 million kwh in 1947 to 37.1 millions in 1951, and production from 130 billion kwh in 1938 and 170 billions in 1947, to 237 billions kwh in 1951. Coal was to contribute but 60 per cent of the energy consumed in 1951 and petroleum 30 per cent: the respective figures for 1935-38 were 82 and 10 per cent.¹⁷

Estimating resources and requirements is a relatively easy task compared with others that were required in order to make the plan realistic. Space precludes a full discussion of the problems not solved, or at best only partly solved.

Would the imports required from non-participating countries be made available? Would the United States provide the dollars required to finance them? Would the United States be prepared to finance goods and services purchased in countries other than the United States? (About one-half of Great Britain's purchases requiring borrowed or donated dollars over the four years were to be from outside the United States.) To what extent should the participating countries sell to other members of the group, thus relinquishing dollars that might be had? In what manner would the participating countries deal with the inflationary pressures reflected in a growing excess of money and budgetary deficits, which in turn jeopardize any recovery? How would the countries implement their pious expressions of faith in multilateral trade and convertibility of currencies on exchange markets so long as a large proportion of the countries did not acquire large surplus monetary reserves and achieve a general strengthening of the international economic position? Could the participating countries allocate the resources obtained from the United States in a manner to obtain the maximum beneficial effects on their economies, thus, for example, using grains to stimulate output of miners rather than allowing them to escape to black markets? These are some of the questions raised. In addition, there are questions of internal consistency: the relation of output of coal and electricity, steel and transportation equipment; of bread and coal; the relation of output and imports and exports; the assumptions concerning future prices of traded commodities and hence the value of exports and imports.

The President's Committee on Foreign Aid (Harriman) released a report, November 1947, which clarified some of the issues. The estimated aid by the United States was reduced to \$12-17 billion. Since commodities required were not available to a substantial degree and since others, at least in part, might finance exports from third countries to Europe, the aid was pared down. It was also possible for Europe to

¹⁶ Committee of European Economic Co-operation: Vol. I, *General Report* (1947), pp. 14-15.

¹⁷ *Ibid.*, Vol. IV, *Technical Reports*, pp. 172-3, 193.

expand its exports beyond the amount estimated and to conserve resources by slowing down its program for capital expansion.

In Chapter VIII, we discuss further the problems of the balance of payments. Here we should note that the United States Government approved the ERP in April, 1948, and the program has been in operation for about one year. Its cost over four years may well be 15-20 billion dollars. On the basis of the experience of the first year of operation, we may conclude that the ERP has at least slowed the advance of communism, has contributed importantly to large economic advances in Europe, has stimulated intra-European trade, but so far has failed to induce adequate improvement in fiscal and monetary policies, and in European cooperation. One of the obstacles confronting the sixteen European participating countries is the conflict of the British policy of austerity and controls which looks in the direction of independence from American aid by 1952, and a Continental view which abhors planning and would achieve international equilibrium through an expungement of controls and a rise of United States imports.¹⁸

Summary

Planning generally substitutes allocation according to goals determined by authority for allocation of resources in response to price and income movements. In response to economic deterioration and theoretical advances, planning makes substantial progress. Here we have briefly analyzed Russian planning, with its almost complete control of resources and their distribution, and with its reliance both on the carrot (incentives) and the stick (compulsion); British planning, with the outlines of a general plan and a determination to favor democracy against socialism; American planning, with its statement of vague objectives and the exclusion of weapons to implement; and several semi-planned economies.

¹⁸ Cf. S. E. Harris: *European Recovery Program* (1948, Harvard University Press), and *The Economist*, London, January 1, 1949, pp. 3-4.

Economic Decline and Recovery

Introduction

PLANNING is a product of misfortune. When war saps a nation's vitality and destroys capital and stocks, so that even minimum standards of living cannot be maintained, those in distress look to government. They are no longer content to rely upon the pricing system and unrelated and unintegrated decisions of entrepreneurs for optimum production and acceptable distribution. To understand the advance of planning the broad contours of decline and recovery must be plotted. Planning makes its greatest advance particularly in the areas where production collapses, prices skyrocket, and distribution breaks down.

Relative Growth and Decline

All countries are not worse off as a result of the war. Despite outlays of \$350 billion for war, the United States, for example, was turning out 60 per cent more goods and services in 1947 than before the war, and its money national income, which averaged \$71 billion in 1937-39, was \$200 billion in 1947. In four years of war, net income had averaged about \$140 billion. The gains were not so large as they seemed, for a large part of the production went for war, and even in 1946 and 1947 a significant proportion of the output was helping meet deferred costs of the war. But consumption attained a peak of about 20 per cent above pre-war during the war; and by 1947, it reached \$165 billion as compared with \$66 billion in 1937-39, or a rise of more than 150 per cent

above pre-war levels in monetary terms and 50 per cent in real terms.¹

With the large contributions of war to both destruction and demand, the United States experienced such unparalleled periods of prosperity from 1941 to 1947 that both politicians and the public were disposed to forget the unemployment and bankruptcies of the thirties. Surfeited with wartime controls and smug about the resilience of the system of free private enterprise, the American public and its representatives in Congress were not disposed to tinker with their economic machine. Planning was in the doldrums. The number one problem seemed to be to learn how to live at a standard of living 50 per cent above pre-war.

Other countries also had benefitted from war. Latin America and Canada might especially be mentioned.² So long as they were in a position to profit from the wartime demand and were not subject to wartime destruction, these countries gained. Contraction of American exports restricted their increases to some extent; since their pre-war unemployed resources had not been so large as in the United States, the gains were relatively moderate compared with those in this country.

Contrast the decline in war-stricken countries. The enthusiasm for planning is a function of the decline. There are, indeed, exceptions—in Greece, for example, a serious deterioration is matched by an almost equal lack of enthusiasm for planning.

It is especially in Europe that planning makes advances; and it is there also that economic conditions are most unsatisfactory. Consider, for example, the facts marshalled by the Committee of European Economic Co-operation (*General Report* of September 1947), representing sixteen European nations—countries in the Soviet orbit are excluded.

1. Production of all cereals in 1947-48 (estimated) was but 48.9 million metric tons (M.M.T.) as compared with 64.5 M.M.T. the average in 1934-38.

2. Production of meat was down from 9.0 to 6.0 M.M.T.

3. Production of milk from 72.5 to 57.0 million tons.

4. Production of coal and lignite was 552 million tons in 1938, and 439 million tons in 1947.

5. Production of crude steel was 45.5 million tons in 1938, and 30.3 million tons in 1947.

These are, indeed, serious declines, and they seem even greater when compared with the expansion in the United States, and when allowance is made for the vast destruction of war, and, therefore, the unusual demands for production of new capital goods.

By 1947, however, considerable progress had been made. The impetus to make plans which would assure the most effective use of limited

¹ *National Income, Supplement to Survey of Current Business*, July 1947, pp. 19-23; *Midyear Economic Report of the President* (July 21, 1947), pp. 61-3.

² See *Economic Problems of Latin America* (S. E. Harris, Editor), 1944.

resources should be related to the trough of 1944-45, not the plateau of 1947. According to the Committee of European Economic Co-operation, industrial production in Belgium, France, and the Netherlands had been reduced to 30-40 per cent of pre-war and in Italy to 20 per cent.³ The low point (annual figures) for industrial production of important countries, according to the United Nations, is as follows:

ECONOMIC CONDITIONS OF VARIOUS COUNTRIES⁴

(1937 = 100)

	<i>Industrial Output</i>	<i>Electricity</i>	<i>Pig Iron Production</i>
France	44 (Aug. 1945)	84 (1944)	15 (July 1945)
Germany			
American Zone	36 (1946)		8 (Mar. 1946)
British Zone	31 (1946)		4 (Sept. 1945)
Japan	31 (1946)	78 (1945)	6 (July 1946)
Netherlands	31 (1945)	43 (July 1945)	
Poland	48 (May-Dec. 1945)		4 (1945)

It is clear from this brief survey that industrial output had declined to a dangerously low level by the end of the war or early postwar period. The unavailability of fuel, iron and steel, and machine tools, the breakdown of transportation and trade, and the weakening of the financial fabric—all contributed to the insistent demand that government marshal all resources, then determine their use and the distribution of the final product.

Under government guidance, conditions began to improve. Thus, employment in Poland (excluding agriculture) rose from 63 (1937 = 100) in November 1945 to 116 by the end of 1946; employment in manufacturing in France, from 94 in 1945 to 106 in the first quarter of 1946; in Norway, from 80 in July 1945 to 123 in May 1947; in Sweden, from 103 in 1945 to 120 in May 1947. Belgium's industrial output rose from a low of 33 to a peak of 99 in April 1947; France, from 44 to a peak of 94 in October 1946; Germany (American zone) from 26 to a peak of 46 in May 1947; Japan, from 18 to 41 in May 1947; Netherlands, from 31 to 92 in October 1946.⁵

The Lag in Recovery

The rapid recovery from 1945 to the end of 1946 was not expected to continue in 1947 and 1948. French industrial output had risen from

³ *General Report*, Vol. I, pp. 7, 16, 19, 21.

⁴ Calculated from *Monthly Bulletin of Statistics of the United Nations*, July 1947, pp. 24-6, 35-6, 38-9.

⁵ See figures, *ibid.*

65 in January 1946 to 93 in October 1946, and Italian from 28 to 66 in these months (1938 = 100). Obviously, the curve had to flatten out.⁶ A climber, speeding up a mountain side, cannot be expected to increase his rate of acceleration indefinitely. Soon that rate will decline and even his absolute rate of speed will fall; and should he exert himself unduly in the light of his previous exertions and available supplies, he may well ultimately stop climbing and even be forced to descend.

Economic planning undoubtedly contributed to the rise in output during the first two post-war years. Then the pace-setters began to meet difficulties. Other countries were not advancing as rapidly; and these laggards were bound to retard the general advance. In economic advance, the failure of a number of countries to keep up with the vanguard may be just as disastrous as the failure of some members of a football team whose task it is to dispose of potential tacklers, to keep ahead of the ball carrier.

In the Europe of 1947-48, recovery was especially unsatisfactory in Germany and in some of the Eastern European countries; and the mixed recovery of the United Kingdom and the slow recovery of Asia were not without significance. Failure of agricultural output to attain pre-war proportions was harmful to many of the agricultural countries of Europe.⁷ In 1946, the yield of grain was 96 in Greece, 89 in Albania, 38 in Poland, 71 in Czechoslovakia, 79 in Italy, and 45 in Austria (pre-war = 100). (Indeed, allowance should be made for territorial changes.) The Committee of European Economic Co-operation reported for the sixteen countries covered that in 1947-48 cereal production would be 25 per cent below pre-war, and both bread grains and meat about one-third less. Output of potatoes was to be equal to pre-war, milk, fats, and oils about 20 per cent less.⁸

Germany's collapse was especially unfortunate. Europe's coal output in the sixteen nations was down drastically in 1946 and 1947, due largely to the decline in the Ruhr and secondarily in the United Kingdom. Without coal, it is not possible to produce adequate supplies of iron and steel, electricity, transportation services, and, therefore, all kinds of other commodities. Since Germany is the center of Europe's machine industry, her present state of inactivity reacts with disadvantage upon the rise of Europe; Europe, in turn, not only loses the sources of much of its coal, machines, and chemicals *inter alia*, but also suffers serious losses of markets.⁹

⁶ *Federal Reserve Bulletin*, April 1947, p. 354.

⁷ Cf. UNRRA: *Economic Recovery in the Countries Assisted by UNRRA* (1946), p. 3.

⁸ *Ibid.*, p. 16.

⁹ Cf. J. K. Galbraith: *Recovery in Europe* (NPA, 1946).

Confronted with chaotic conditions once the Germans left, many of the occupied countries had recourse to nationalization. Poland, Czechoslovakia, Yugoslavia, Hungary, Bulgaria, and Roumania, in particular, introduced nationalization of crucial industries, especially those dominated by large firms. In view, on the one hand, of the churned state of property rights and the difficulties involved in finding the rightful owners, and, on the other, of the need in the conditions of 1945-47, to determine policies of these industries in accordance with national objectives, there seemed to be no alternative to nationalization. Whatever its merits, the early results unquestionably were not favorable to rapid recovery. Problems of compensation, of labor relations, of objectives, and of relations with foreign countries arose to harass the agents of government. There is much evidence of unsatisfactory results.¹⁰

Failure of the British to achieve complete recovery did not help matters. Employment in manufacturing rose from a low of 93 (1937 = 100) in December 1945, to 104 in June 1947; but coal production in the last quarter of 1946 was 20 per cent below the level of 1937, and stocks at half the pre-war level. Despite the reduced level of coal output, production of electricity was about 75 per cent above the pre-war amount.

Nevertheless, the economic situation was not satisfactory. Lack of coal was bound to affect many industries adversely. Shortage of dollars—which reflected, in part, the loss of earnings in foreign investments and shipping, and the large rise in government expenditures abroad; in part, the large requirements for imports to help rebuild the economy and sustain a full employment economy; and, in part, the failure of exports to recover rapidly enough—was another deterrent to satisfactory recovery.¹¹ A third difficulty stemmed from the extensive resources required to cover exports, investment, and government. Although production was roughly at the pre-war level *early in* 1947, exports, capital, and government required one-half of total output, whereas in the late pre-war they

¹⁰ Cf. S. L. Sharp: *Nationalization of Key Industries in Eastern Europe*, (Washington, 1946), especially Chs. I, III, and IV; also see State Department: *Problems of United States Foreign Economic Policy* (Sept. 1947), pp. 15-17.

¹¹ According to a series of articles by the London *Economist*, the British deficit in the balance of payments rose from £70 million in 1938 to £400 million in 1946, a rise which occurred despite a gain of £220 million in exports relative to imports. How, then, is the *gross* rise in deficits of 330+220 or £550 million to be explained? Since from 1938 to 1946 the price of British exports rose by 96 per cent and of imports by 110 per cent, the adverse balance of payments grew by £140 million or 25.7 per cent on account of price change. An equal rise in prices of exports and imports would affect the British adversely, since they import more than they export. Then a reduction in earnings on capital, shipping, insurance, and the like account for £128 million or 23.3 per cent additional and the increase in government expenditures abroad £282 million, the remainder, or 51.0 per cent.

consumed but one-third. It is not surprising, then, that in 1947 it was estimated the British had £6 billion available for expenditures on consumption goods but only £5 billion of consumption goods available at stable prices. Years of destruction and failure to replace and maintain capital increased the inflationary pressures in post-war Great Britain. Even by 1944, the Government had estimated the country's disinvestment at £7.3 billion; and later, an English economist estimated that £14 billion of capital was required in order to pay for restoration of war damage (£1.450 million), deferred maintenance and replacement (£3.120 million), new capital (£7.950 million), and budgetary deficits, exports and repayment of capital, etc. (£1.5 million). Early in 1947, anticipated savings were but one-half of the amount required. More recently, an official report puts war losses of capital at \$30 billion, or one-third the country's pre-war wealth.

In recent discussions, British economists have emphasized the excessive diversion of resources to investment. Professor Hicks, for example, comments on the tendency of low rates of interest to stimulate long-term investments excessively, and Professor Robbins comments on the economic megalomania which plans for excessive expansion of exports, housing, and programs of social and business development.¹² Indeed, early in 1947 (before the crisis), it was estimated that capital equipment and maintenance would require 20 per cent of the nation's income, in contrast with 16½ per cent in 1938. Public expenditures, moreover, now absorbed 24½ per cent (11 per cent for defense, in contrast to 7 per cent in 1938). Considering the neglect of investment in war times and the crying need for modernization, the plans in 1946 did not seem extravagant. It should be noted, moreover, that manpower in distribution and consumer services had fallen from 5.1 million in June 1939, to 4.3 million (anticipated) in 1947; and though total employment was up by 1.1 million (6 per cent in December 1946 over June 1939), consumer goods and services absorbed 900,000 (10 per cent) less. Furthermore, personal consumption was to account for but 66½ per cent of income in 1947, as compared with 78 per cent in 1938.¹³ *The oncoming of the crisis focused attention on investment and social expenditures which in 1945 and 1946 had seemed reasonable.*

In short, British recovery had stalled by 1947. Serious bottlenecks in coal, shipping, transportation, and excessive demands on the limited resources available—as well as dollar famine and excessive purchasing power relative to the supplies of consumer goods made available by a

¹² J. R. Hicks: "World Recovery after War—A Theoretical Analysis," *Economic Journal*, June 1947, pp. 158-9; L. Robbins: "Inquest on the Crisis," *Lloyd's Bank Monthly Review*, Oct. 1947, p. 11; and the brilliant *Are These Hardships Necessary* (Dec. 1947, Second Edition Revised), pp. 101-2, 117-18, by R. Harrod.

¹³ *Economic Survey for 1947*, pp. 31-6.

sick economy—contributed to the British difficulties. In the second half of 1947, some improvement occurred.¹⁴

Inflation

Undoubtedly the rising threat of inflation contributed to the deterioration of economic conditions. Inflation is a symptom of economic disease—of inadequate production and poor distribution. As a result of years of mal-provisioned markets, budgetary deficits, and expanding supplies of money, the pressure of money on markets steadily grows. Since the war, inflationary forces have been strengthened by various factors: the demand of labor for higher wages in socialist or semi-socialist economies which becomes more and more insistent and difficult to deny; earned income, as a result of years of destruction, does not yield consumer goods alone but also large amounts of capital goods and services of large bureaucracies; productivity has suffered greatly because of years of inactivity and deterioration of plant.

The path to monetary stability is not a smooth one. More production—particularly of consumer goods, the treatment of serious bottlenecks, and the dishoarding of goods by farmers will help. Most governments take strenuous measures to increase supplies: by increasing imports, and especially through foreign credits; by restricting inventories of business, farmers, and consumers; by trying to modernize plant; by importing labor or increasing the number of workers in other ways; by assuring the most effective use of factors and materials in short supply.

To reduce prices or keep them from rising it is necessary not only to raise production and supplies, but also to check demand. No increase in production will suffice unless supplemented by control of demand—purchasing power is too high in relation to the flow of consumer goods. Recovery of production is a slow process; and under the relentless pressure of satisfying day-by-day needs, the temptation is to concentrate on consumption goods and postpone replacement, renovation, and modernization of plant. The reader will recall Britain's decision in 1947 to slow up its modernization program. Before the planners can divert large resources to capital—at least in a free society—they have to assure the satisfaction of minimum needs today, with the result that the day of adequate production is postponed.

Faced with the threat of inflation, European countries have recourse to both supply and demand measures. As a minimum to curtail demand,

¹⁴ See *Economic Survey for 1947*, pp. 15-28; F. W. Paish: "The Finance of Reconstruction," *Economic Digest*, May 1947, p. 3; U. K.: *Statistical Material Presented during the Washington Negotiations*, (Cmd. 6707, Dec. 1945), pp. 7-15; *Statistics Relating to the War Effort of the United Kingdom*, (Cmd. 6564, Nov. 1944); *Labor and Industry in Britain* (Special Issue, Sept.-Oct. 1947), p. 175.

they allocate scarce supplies and resort to rationing. As a maximum, they will achieve a balanced budget, an outcome which might exclude further monetary expansion; and they may contract the currency. Many countries adopted the unorthodox measures of demonetizing part of the total supplies of money—a monetary purge (e.g., the U.S.S.R. in the winter of 1947-48); and others, once the price level had attained dizzy heights, also reconverted their old money for much smaller supplies of new money.

Irrespective of the measures taken, however, inflation, overt or latent, continues. A worker who earns 10,000 francs a month and is allowed to spend only 5,000 francs at controlled prices, is forced either to hoard the remainder or purchase supplies on black markets at scandalously high prices; and he will soon sense that wages buy little. He is, therefore, disposed to work less hard and earn, say, 5,000 to 8,000 francs. Farmers also are tempted to withhold supplies from the markets so long as the money they receive buys little. In Greece, for example, the average prices received by farmers rose about 115 times from pre-war years to May—July 1946; but prices paid by farmers rose by more than 300 times.¹⁵ Obviously, under these conditions they are not enthusiastic about provisioning markets.

In short, measures to restrain demand are helpful in that they keep prices down on controlled markets, and help to attain a fair distribution of the scanty supplies available. But the fundamental shortages persist, and so long as they do, full co-operation of workers, farmers, and investors will not be had. The only complete answer to inflation is reconstruction and rehabilitation of the economy, which will provide adequate supplies to make it worth while for labor and managers to work and plan. In this connection, a word on foreign aid should be interjected. The solution to the problem does not lie in getting rid of the inflation as a condition of foreign aid; but rather, foreign aid is to be regarded as the means of neutralizing inflationary forces.¹⁶

Shortage of Dollars ¹⁷

This discussion leads to the problem of international economic relations. According to the Sixteen-Power European Conference, these countries will be short some \$22 billion in dollars over the years 1948-51. Unavailability of foreign exchange is a most serious matter for the sixteen countries, because only through imports to cover their deficiencies

¹⁵ *Report of the FAO Mission for Greece*, p. 12.

¹⁶ Cf. *Committee of European Economic Co-operation*: Vol. I, pp. 26-8; also see Chapter VII for further discussion of inflation.

¹⁷ This problem is discussed more fully in Chapter VIII.

of food, machinery, oil, coal, iron and steel, and other essential products can they hope to re-establish a normally functioning economy. Details of the international economic problems are reserved for discussion later. Here we observe that the provision of an adequate supply of dollars is an anti-inflationary measure of the first importance. The corresponding inflow of goods will enable governments to proceed with their plans to restore and modernize their plant and to meet minimum requirements for food, clothing, and housing without which economies cannot produce adequately.

The impasse in the exchange markets is not comprehensible to those who would rely exclusively on the classical theory of international trade. Under that theory, there is a price at which the market for exchange would be cleared. For example, the 1947 official value of the French franc was less than 1 cent. According to the accepted theory, the French should achieve equilibrium in their balance of payments merely by reducing prices. The reduction might be effected by a cut in prices directly or by a depreciation of the exchanges, say, to $\frac{1}{2}$ or $\frac{1}{4}$ cent, with the result that French commodities would be cheaper on world markets. Another possibility is that equilibrium might be attained by a rise in the price of francs and therefore an increase in French prices. In a seller's market, this is a possible approach, and may well be the answer to those who contend that the European difficulties stem from over-valued currencies.

In the writer's opinion, equilibrium, *in the absence of foreign aid*, will not be achieved at any price of the franc—whether it is 1/1000 of 1 cent or 1 dollar for a franc. The gist of the matter is that the resources are not available to profit from a seller's market (high exchange rates) or bargain prices (low exchange rates). In the present European situation, current production goes primarily to meet minimum needs at home. In the economist's jargon, the elasticity of supply in response to rising prices for exports (in francs, and on the assumption of a reduction in the value of the franc in dollars) is low indeed. As long as output remains subnormal, the problem is not primarily one of pricing but rather of supplies. Under no conceivable value for the franc or world prices of French commodities will the French be able to pay for their import needs out of sales of French products and services abroad. Drastic economies in the use of scarce resources will help; but even more important and indispensable is the largess from abroad. Even the devaluation of January 1948, which reduced the value of the franc on export markets to less than $\frac{1}{2}$ cent, though it may well have raised the supply of dollars obtained, can at best be only a partial remedy.

A deficiency in the balance of payments of, say, \$5 billion annually for Europe, or \$2 billion for the United Kingdom should, it might be

assumed, lend itself to price and exchange movements or manipulation. With a national income of around \$30 billion, surely the British should be able to adjust exports and imports by \$2 billion, or about 7 per cent. That the classical adjustments do not correct the situation may be explained largely by two considerations, in addition to the inelastic supply conditions discussed above.

(a) The difficulty of reducing prices on world markets and the unwillingness of Britain's potential customers to purchase British luxury exports. Similarly, everywhere in Europe it is difficult to reduce world prices; for a depreciation of exchanges is likely to bring rises in wages and other costs which will greatly reduce the contribution of exchange depreciation to reduced prices of goods on world markets. An ensuing decline of imports is, however, a gain to be considered. Direct assaults on costs and prices with a view to bringing them down are even more difficult to achieve. That in 1947, the British £ was undervalued, that is, cheap, strengthens the case against depreciation. On the Continent, the case is stronger, since their currencies were generally overvalued in 1947.

(b) At present low standards of living, the British public is not prepared to accept a contraction of its standard of living by 5-10 per cent, which would be required, for a cut in imports or (and) a rise in exports would largely be at the expense of consumption standards. (Leading British economists suggest, however, large cuts in investments.) Aside from the technical difficulties of expanding exports and cutting imports rapidly (suggested above), the government has to consider the political obstacles to reducing the standard of living further. Actually, the British in 1947 tried to cope with the crisis in part by expanding exports, cutting imports and the standard of living, cutting back the capital investment program, and, finally, by using up reserves and seeking financial aid abroad.

Before turning to the next chapter, we should add a paragraph on the improvements in 1947-48 of Western Europe, associated at least in part with the ERP. Production soared; intra-European trade rose; the dollar deficit was reduced; and at least some progress was made in contending with inflation. An indication of progress, actual and anticipated, is suggested by the blueprint for the sixteen participating countries and Western Germany prepared in October, 1948. From 1947-48 to 1948-49 there would be a rise of 45 per cent in the output of bread grains; of 13.7 per cent in coal; of 8 per cent in electricity; of 39 per cent in petroleum; of 27 per cent in nitrogenous fertilisers. Intra-European trade should rise by 25 per cent over the 1947 figures. Substantial increases in the consumption of grains and fats and oils and tobacco would occur. The relevant countries anticipated a rise in production and

economies which would cut the demands for dollars in the year 1948-49 by about \$1400 million.¹⁸

Summary

Europe had experienced a remarkable recovery until 1947; but the numerous bottlenecks, the confusion inevitably accompanying a nascent nationalization, the excess of purchasing power which follows a destructive war, the breakdown of trade and, in particular, the disappointing recovery in Germany, and, finally, the crop failure in 1947—all of these, together with the dollar shortage, which is both a symptom and a cause of economic disaster, brought on the crisis of 1947, and further increased the pressure to extend planning.

¹⁸ Organization for European Economic Cooperation, *Report to ECA on the First Annual Programme, 1st July 1948-June 30, 1949*, pp. 4-7.

Full Employment and Unemployment

The Full Employment Objective in the United States

IN THE war years, full employment was the prime objective of planners, in both capitalist and semi-capitalist economies. Distraught by the losses, economic, social, political, and medical, resulting from large amounts of unemployment, political economists, and particularly those under the influence of Keynes, Beveridge, and Wallace, preached full employment and drafted blueprints in which jobs for all was written in large italics. Never again, it was said, would this country, as in the thirties, incur losses of \$300 billion as a result of unemployment.

Supported by President Roosevelt and buttressed by the interest of 60 million workers who still anticipated a crisis around the corner, Senator Murray and several colleagues in 1944 prepared a full employment bill which would have put the responsibility for adequate demand and jobs for all squarely on the government. Others feared the effects which a job guarantee might have on the fiscal position of the Treasury, on the price level, and, particularly, on the status of private enterprise. Although they constituted a minority, this group was more vocal, more influential, and, in general, better organized to influence Congress than the masses. Thus, the Employment Act of 1946 which was enacted was a much watered-down version of the original Full Employment Bill.

Declining Interest in Full Employment

An examination of the plans reproduced here will suggest that full employment is not a primary consideration of the planners. In many of

them, the problem is not even discussed. This lack of major interest can be explained by a variety of reasons.

First, and most important, is the fact that at present in most countries, anyone who wants a job can have one. In regimented and free societies alike, the problem is not one of finding employment for all seeking it, but that of finding workers to do the necessary tasks. In the regimented society, pressure is put upon those on the farm to move into the cities, and work in the factories. (We shall discuss this more fully later). In free societies, the incentive of high pay, subsidies (e.g., housing or payment of transportation expenses) are used to increase the supply of labor.

The Japanese White Paper of July 4, 1947 (*Economic Condition of Japan*) reveals well the use of the incentive system.

In order to attain a higher output by workers who are mostly responsible for increasing production, special rations of rice over the standard ration for workers are being distributed on a priority basis out of extremely restricted national resources. . . .

Programs for Securing Articles for the Use of Miners

(a) As for staple foodstuffs, 6 go for a worker, 3 go for each member of his family (excluding surface workers) and 1 go for each worker per day as between-meal food (including surface worker). Besides, miso, soy sauce, salt, vegetable, fish and shell fish, etc. will be rationed, securing more than twice as much as the general rates.

(b) As for fancy foods, 1 go of sake per day (including the ordinary ration) will be given to underground workers in accordance with their actual working days and 5 go per month to surface workers. 50 cigarettes per capita per month will be given as an additional rationing. . . . Sweets, 100 momme per capita per month will be supplied to juvenile miners and women workers instead of sake and cigarettes.

At last, the world has attained that workers' Utopia envisaged by Lord Beveridge, in which there are more jobs than men seeking them. After six years of actual warfare and additional years of political turmoil and quasi-war conditions, the world is short of both consumers' and capital goods. It is necessary not only to produce for current consumption, but also to build plant, equipment, and housing, replenish inventories, maintain large armies and inflated governmental staffs.

Working without capital or with adequate and antiquated capital goods, labor's productivity is below par. Revolutionary changes in institutions (particularly in the control of economic processes), and in the relation of capital and labor, whatever their long-run results, reduce

productivity—temporarily at any rate. With more goods needed than available, the deficiency becomes even greater as output per man-hour declines.¹

Shortages of capital, including stocks of consumption goods, reduced productivity, diversion of manpower to military and other relatively unproductive employment—these explain why there are more jobs to fill than men and women to fill them, and hence suggest one cogent reason for the dwindling attention being paid to full employment.

A second reason stems from the unfortunate effects of full employment, which were not adequately foreseen by those who spun the theory of full employment. Perhaps in their defense it might be said that they envisaged a full employment economy rather than the over-employed economy characteristic of post-World War II.

Among the malignant diseases which seem to be indigenous to a full employment economy, inflation and bottlenecks especially require attention, treatment, and cure. In a full of over-employed economy, both labor and capital, and, in fact, sub-species of both, are in a strategic position for blackmailing our modern society. On the threat of withdrawing its co-operation, labor and (or) capital may demand and receive higher rewards, which are then translated into higher prices, should their demands for higher pay then be satisfied. A few hundred elevator operators in New York City may paralyze a metropolitan area of 10 millions, with serious effects (with a lag) on the rest of the nation and the world. Should their demands for higher prices not be met, a few large packers may conspire to withhold meat from 130 million people. The price of satisfying their demands is inflation; the price of resistance is a shut-down, and ultimately more inflation.

In an over-employed economy, reserves of raw materials, of machines, of hundreds of essential complementary items become increasingly unavailable. Stoppages of work, therefore, are the more dangerous. A steel strike will soon stop work in hundreds of industries using steel, and, in part, because in a world where scarcities predominate, reserves are small. Should the government through price control attempt to contend with the inflationary pressures, the shortages may become even more serious. Frustrated by the price administration, the producer and middleman in peace time will be less disposed to produce and retain materials than under a free pricing system (with the stimulus of anticipated price rises), or than under a controlled price system *implemented by vigorous and effective controls of production and distribution.*²

¹ The problem of productivity is discussed in Chapter V.

² Cf. J. R. Hicks: "The Empty Economy," *Lloyd's Bank Monthly Review*, July 1947, pp. 2-4.

Plans of Employment

Despite what has been written above, there continued to be some concern over full employment. My point is simply that the attention devoted to the problem was less than might have been expected from the emphasis placed upon it in the thirties and early forties.

Perhaps the strongest statement is to be found in the Czechoslovakian plan: "The new Constitution will express the principle that every citizen has the right to work, to a fair reward for his work, the right to education, recreation and to maintenance if he is incapable of working."³

Concerned with both domestic and international problems, the United Nations Conference on Trade and Employment went even further than the Czechoslovakian Government: "The Preparatory Committee considers that governments owe a responsibility not only to their own citizens but also to the citizens of other countries to do all that is within their power to maintain full and productive employment and high and stable levels of demand within their territories."⁴

Among the Anglo-Saxon countries, Australia evidenced the greatest interest.

Full employment is a fundamental aim of the commonwealth government. The government believes that the people of Australia will demand and are entitled to expect full employment, and that for this purpose it will be able to count on the co-operation of servicemen's associations, trade unions, employers' associations and other groups. . . .

In peace time the responsibility of commonwealth and state governments is to provide the general framework of a full employment economy, within which the operations of individuals and businesses can be carried in. . . .

The maintenance of conditions which will make full employment possible is an obligation owed to the people of Australia by commonwealth and state governments. . . . Unemployment is an evil from the effects of which no class in the community and no state in the commonwealth can hope to escape, unless concerted action is taken.⁵

In the noted White Paper on *Employment Policy*, the British government promised to take vigorous measures to maintain total expendi-

³ *Statement of Policy of Mr. Gottwald's Government* (1946), pp. 10-11.

⁴ *Report of the First Session of the Preparatory Committee of the United Nations Conference on Trade and Employment* (London, Oct. 1946), p. 4.

⁵ The Parliament of the Commonwealth of Australia: *Full Employment in Australia* (1945). This is reprinted in *Hearings before Subcommittee on Banking and Currency U.S. Senate on Full Employment Act of 1945*, pp. 86-104 (Cf. pp. 86-7 of revised edition).

ture and "to accept in future the responsibility for taking action at the earliest possible stage to arrest a threatened slump." They were not, however, prepared to go beyond accepting "as one of their primary aims and responsibilities the maintenance of a *high and stable level* of employment after the war." ⁶ (*Italics mine.*)

Canada also was not prepared to accept the responsibility for *full* employment.

The ultimate aim of all reconstruction policies is the extension of opportunity, welfare and security among the Canadian people. . . .

In this paper, the government has stated unequivocally its adoption of a high and stable level of employment and income, and thereby higher standards of living, as a major aim of government policy. It has been made clear that, if it is to be achieved, the endeavour to achieve it must pervade all government economic policy.⁷

The United States Employment Act of 1946 states the "responsibility of the federal government to use all *practicable means consistent with its needs and obligations and other essential considerations of national policy* . . . to coordinate and utilize all its plans, functions, and resources" in order to attain the stated purposes of the Act—"maximum production, employment, and purchasing power."⁸ (*Italics mine.*) This statement of responsibility, despite the broad objectives, clearly limits the measures which the government might take in order to achieve the goals.

Persistence of Unemployment

Labor is scarce, as the various plans make eminently clear. In the French economy, for example, labor, coal, iron and steel, electricity, and foreign exchange are singled out for special consideration since they are limiting factors. It is scarcely necessary to add that the supplies of each of these scarce items depends in turn upon the availability, in adequate amounts, of the others.⁹

Yet even while governments scout for additional labor, unemployment in substantial amounts continues to haunt them. In its *Economic Survey for 1947*, the British Government was distressed by the shortage of labor, and yet had to admit to 400,000 unemployed, or 2½ per cent of the insured population. In the development areas (formerly the depression areas) unemployment greatly exceeded the national average. By a

⁶ Pp. 3, 16.

⁷ *Canadian White Paper on Employment and Income* (April, 1945). Reprinted in *Hearings before Subcommittee on Banking and Currency, U.S. Senate on Full Employment Act of 1945*, pp. 98-112 (Cf. p. 98 of revised edition).

⁸ Council of Economic Advisors: *First Annual Report to the President*, Dec. 1946, pp. 3-4.

⁹ *Rapport Général sur le Premier Plan de Modernisation et d'Équipement* (1946-47), pp. 63-82.

policy of favoring these areas, the government was gradually reducing the amount of unemployment in these localities. Thus by the end of 1945, for the country as a whole 684 new factories or extensions and modernizations had been approved; and more than half related to these areas, which accounted for but one-seventh of the population.¹⁰

Maldistribution of population was not the only source of unemployment. An over-employed economy, with its accompanying lack of reserves, brings critical shortages of materials, which may be aggravated by a crisis in labor, coal, transportation, or even bad weather conditions. Under these circumstances, workers eager to be employed may, nevertheless, have to walk the streets. Should all those whom government would have join the labor market actually do so, the ensuing unemployment induced by scarcities would greatly increase.

Great Britain was not alone in its periodic shortage crises. Germany offers an excellent example of a country with the most glaring shortages which make it impossible to keep a large part of the population employed. Germany's difficulties originate in the damage done to plant and transportation by the war; in the loss of 25 per cent of her food without a corresponding loss of population; in the failure to achieve economic unity within the four zones; in the inability to develop exports to pay for essential imports. A population anxious to work in order to achieve a minimum standard of living was, indeed, unable to do so. The American zone was short of coal, the French and British zones of food, the Soviet zone of iron and steel. Coal mining, forestry, and construction were short of labor, and yet unemployment prevailed among classes of labor trained for work in various (e.g., war and heavy) industries. Unemployment was especially high among clerical, administrative, and commercial workers. It is not surprising that by the end of 1945, production in the American zone was only 10 per cent of existing capacity, and even by June 1946, only 29 per cent.¹¹

Another aspect of unemployment, i.e., *disguised* unemployment, should be underlined. In many countries, the planners focused attention on the unproductive nature of work. In Germany, workers returned to the farms where food might be had. In numerous countries, as we shall see, emphasis was put upon the higher productivity in industry rather than in agriculture. In Great Britain and Czechoslovakia, economic architects emphasized the excessive numbers in non-essential industries.

¹⁰ *The Battle for Output for 1947*, pp. 38-9 (*Economic Survey for 1947*, pp. 27-8); *Industrial Opportunities in the Development Areas* (Reprinted from the *Board of Trade Journal*, 1946) pp. 3-4.

¹¹ U.S. State Dept.: *United States Economic Policy towards Germany* (1946), pp. 31-49; Office of Military Government for Germany (U.S.): *A Year of Potsdam, The German Economy Since the Surrender* (1946), pp. 82-3.

In many countries, wages had risen less than the cost of living. Yet money wages were still too high in relation to the supplies of consumption goods available. Once workers realized that part of their money wages could not be validated in commodity markets, they tended to lose interest in their work; and absenteeism was on the increase.

Perhaps nowhere are the issue of "disguised" unemployment or absenteeism put more effectively and in more colorful language than in the Japanese White Paper.

Judging from the Census on April 26, 1946, the number of the completely unemployed, (that is, who are able to work and willing to work but held no jobs) was only 1,590,000 and the number of people who worked for one week or less a month was 1,960,000, and the number of people working between 8 days to less than 20 days a month numbered 4,320,000. This state of affairs should be called the latency of unemployment. It is due to the fact that, under the inflation, if economic control is imperfect, one can earn one's bread without working in constant jobs, or such person can often make a livelihood more favorably than a constant employee. Under the inflation, in other words, unemployment can not be recognised as genuine unemployment. Therefore such unhealthy phenomenon occurs as the fact that the supply of labor is short in fields essential to the national economy and abundant in economically unnecessary enterprises. The result is that the inactivity of production will be accelerated and economic recovery will consequently be delayed, because laborers shun the hard production jobs and concentrate on easy or merchant-like jobs.

According to the Committee of European Economic Co-operation, labor scarcity is the rule in Europe, except in Italy and possibly Germany. In Italy the rate of population increase exceeds the absorptive capacity of industry and agriculture, with the result that the present excess supply of labor there is no less than 2 millions.¹² If means could be found to utilize this labor as well as that of displaced persons, part of the scarcity might be overcome.

Summary

Full employment, the slogan of the masses in the depressed thirties and the hopeful forties, receives less attention by the planners than might have been expected. Among the reasons for this under-emphasis, the following may be mentioned: in general, there were more jobs than workers; at the same time, the full employment economy, with its bottlenecks, wage disputes, and inflationary pressures, lost some of its appeal.

¹² *General Report*, p. 24.

Although scarcity of labor plagued the world during the war and early post-war period, planners also had to take note of absenteeism, the aftermath of mal-provisioned markets; of disguised unemployment, evident in the down-grading of workers; and even of substantial amounts of unemployment, related to shortages in materials, insufficient mobility, and, in some areas, an excessive rate of population increase.

Productivity

Introduction

BEFORE and during the war the primary concern was with employment; but with the end of the war, it became clear that there would be plenty of jobs but not enough output. It was necessary to recoup losses resulting from preparation for war and five years of destructive warfare, and to make the most of available supplies of labor and capital. Hence increased productivity became the main target of the planners. Reconversion pains; unavailability of raw materials and capital; an inevitable slowing down after the years of tension; down-grading of many workers; wage disputes; inflation and the resulting lack of motivation and reduced level of output; political uncertainties and tensions; breakdown of international relations; production at less than optimum levels for reasons given above and others—all of these conditions contributed to keeping man-hour output at a low level. It is not surprising that the shift of emphasis was from full employment to productivity.¹

¹ I shall not pause here to discuss all the technical difficulties raised in defining productivity. There are, for example, the usual problems of correct weighting, of adjusting for changes in quality, and prices, of the relation of input and output. In the most popular index, man-hour output, changes may measure not alone increased efficiency of labor or of labor, capital, and management, but also, for example, a rise in the proportion of capital. For some purposes, moreover, output per man-year is much more significant than output per man-hour. In European countries, with inadequate incentives, output per man-hour declines less rapidly than output per man-year. All too often, man-hour output in manufacturing is wrongly assumed to relate to the whole economy.

For an interesting enunciation of many issues of productivity, see *Bulletin of Labor Statistics: Summary of Proceedings of Conference on Productivity*, Bulletin No. 913 (Oct. 1946), especially pp. 1-8.

Reduced Productivity in Japan

Again, Japan presents the problem in dramatic fashion. A coal miner produced 18.9 tons of coal per month in 1933; in May 1947, he was producing but 5.3 tons. Whereas kilometers of railroad tracks in operation in 1936 and 1946 were about the same, the number of employees required in the latter years was $2\frac{1}{2}$ times as large.

By what reasons have such circumstances as above mentioned been brought about? Generally speaking, want of foodstuffs, traffic congestion, lack of dwellings, deterioration of equipment, operation curtailment, difficulties in securing materials and power, poor quality of materials and superannuation of equipment may be cited as the main reasons. Furthermore, laxity of labor discipline and insufficient technical training can also be considered among the reasons.

The Productivity Problem in the United Kingdom

Since World War I, the British have been concerned with the problem of productivity. Whereas the loss of foreign markets turned their attention to man-hour output after World War I, the scarcity of goods and labor moved British experts to consider this problem after World War II.

Even before the war, Dr. Rostas showed that man-day output in the United States was 106 per cent above that in the United Kingdom; and the excess was 20 per cent additional on an hourly basis.² Despite the general awareness of the problem, the 1944 White Paper on *Employment Policy* had little to say other than to admonish labor to encourage entry of new trainees, and to express the need of increasing mobility of workers. In 1944 the problem had been but dimly seen.

By early 1947, however, Downing Street was more explicit: in 1946 output of deep-mined coal was but 259 tons per man compared with 308 tons in 1937. In coal and building, output per man-hour was below pre-war level; in agriculture, above; in manufacturing, the results were not clear.

In the longer view, increased output per man-year is the *only* way to expand production and the standard of living. The way to effect this is by the organized combined effort of men, management and machines. . . . With this direct object, [the government] has allocated large resources to industrial equipment and maintenance work

² L. Rostas: "Industrial Production, Productivity and Distribution in Great Britain, Germany and the United States, 1935-1937," *Economic Journal*, March 1943, pp. 39-54. This study is based on a limited sample.

in 1947 and is ready to make foreign exchange available for imports of machinery which increase efficiency.³

Special commissions had, moreover, dealt with individual industries. One commission had found that, whereas from 1910 to 1936 the output of eight types of grey cloth per man-hour in the United States had increased from a minimum of 46.74 per cent for carded weft sateen to a maximum of 151.8 per cent for terry cloth, there had been little change of productivity in the United Kingdom. Another textile commission emphasized the need of a rise in productivity to cope with a deficiency of man-power of 40 per cent, and increased competition abroad. Its way out was a *gradual* rationalization of the industry, including a two-shift system which would make the turnover to modern techniques less expensive. Only in this manner would it be possible to contend with high wages, scarcity of resources for producing new equipment, and foreign competition.⁴

Studies of specific industries were not very reassuring. A commission of experts on coal must have given the British people some unpleasant hours; they reported that from 1925-27 to 1936, output per man-shift had risen by 54, 81, and 118 per cent in Poland, the Ruhr, and Holland, respectively, but by only 14 per cent in the United Kingdom. In 1938, output per man-shift was 1.148 tons in the United Kingdom, 1.523 tons in the Ruhr, 1.787 tons in Poland, 1.830 tons in Upper Silesia, and 4.37 tons in the United States. This commission listed the advantages other countries had over the United Kingdom, and made radical suggestions to assure the improvement of this vital industry. Natural conditions, indeed, were much better in the United States than in England; but this could not explain British inferiority vis-a-vis European competitors.

It was necessary to consider financial arrangements in use on the continent, which were more conducive to increasing output than those operating in the United Kingdom. In addition, competitors in Europe, as well as in the United States, held other advantages: their tax system was less harmful to output than the British; their mines were larger and more economical to operate; they could shut down non-economical mines with greater facility; they depended less on the use of hand picks and shovels, and more on the use of electricity and on locomotive haulage; standardization of sizes and qualities was more popular abroad than in Great Britain.⁵

A few general remarks should be made about the relevance of pro-

³ *The Battle for Output 1947*, p. 43 (*Economic Survey for 1947*, p. 30).

⁴ Ministry of Production: *Report of the Cotton Textile Mission to the United States of America* (1944), pp. vii, 45; Board of Trade Working Party Reports: *Cotton* (1946), pp. 162-76.

⁵ Ministry of Fuel and Power: *Coal Mining, Report of the Technical Advisory Committee* (Cmd. 6610, March 1945), pp. 27-9, 128-41.

ductivity for the British economy, though one may read too much into the statistical comparisons of man-hour output. In Britain, it is necessary to allow for the production of fine goods which puts more emphasis on quality (textiles); for the smaller market which frequently excludes assembly line methods (automobiles); for the relative cheapness of labor and the small volume of savings which makes outlays on capital per worker as large as in the United States uneconomic in industry generally. In spite of all of this, we must not conclude, however, that low productivity should not concern the British. Its effect on national output is like that of a poor circulatory system on one's health. It does little good to feed the patient well if he is not able to get the nourishment through his system, and so it does little good to put all resources to work if output per unit is low.

High productivity for the British is a matter of economic survival. That the British balance of payments deficit is estimated at £650 million for 1947, or about 12 per cent of the country's personal consumption, clearly shows the necessity of raising productivity. The need of increasing man-hour output is further emphasized by one estimate which places the British requirement at around £14,020 million (about twice the national output) over the next ten years for repairing war damages, deferred maintenance, and replacement; for paying war debts; and for covering budgetary deficits.⁶ These charges on the national output at least temporarily accentuate the difficulties of maintaining the minimum standard of living, without which workers will not fully co-operate.

Emphasis on Productivity in the USSR

Productivity is an old story in the USSR. Indices of industrial output suggest to the cursory investigator unprecedented rises in productivity. In a period of twelve years, 1928-40, industrial output was supposed to have risen by 650 per cent, an unparalleled rise in output, and per capita real output by 352 per cent. It is not surprising that the annual rise in labor productivity was estimated at 8, 13, 13, 21, and 9 per cent beginning with the year 1933, a rise about four times that in the United States.⁷

Actually, Soviet statistical techniques are not beyond criticism. By evaluating output at 1926-27 prices and yet inserting new products at the higher prices prevailing at the time of inclusion, Russian production indices tend to yield an exaggerated rise in output. Since prices rose

⁶ F. W. Paish: "The Finance of Reconstruction," *Economic Digest*, May 1947, p. 30; British Information Service: *Britain's Balance of Payments* (Jan., 1948), p. 1.

⁷ A. Baykov: *The Development of the Soviet Economic System* (1947), pp. 290, 344; A. Yugow: *Russia's Economic Front for War and Peace* (1942), p. 199.

fairly steadily after 1928, the inclusion of a significant part of output at prices above 1926-27 (even though output is presumably measured in 1926-27 prices) inflates the expansion of output, for output is measured not in 1926-27 prices but at rising prices.

Ingenious investigators have checked on the Russian statistics. Relying upon estimates of Russian output in terms of prices in Western countries, Colin Clark finds that Russian gains in productivity have been disappointing. According to his estimates, real income was roughly equal in 1928 and 1934 to that of 1913, and, under the war threat, about 50 per cent higher in 1940 than in 1934. Real output per man-hour was roughly equal in 1928 and 1913, and less in 1934 than in earlier years. By 1937, it was 25 per cent above the 1928 level. Using a similar technique, Dr. Baran discovered that gross national income of the USSR was \$44 billion in 1940 (in 1940 dollars), an amount equal to about two-fifths of United States income at that time. On a per capita basis, Russian consumption was one-fourth of United States consumption in 1940, and considerably less in 1947.

Again, by comparing the rise in output in basic materials and the announced increase in national income, Dr. Gerschenkron gives some indication of the inflation of Russian estimates of income, output, and of productivity. Thus, whereas the index for all industry was 762 in 1939 (1913=100), the index for freight originated was 418, for crude oil 322, for coal 456, for pig iron 361, for steel 446. (Electric power alone had risen more than the general index, which was based, it will be recalled, on 1926-27 prices.)⁸

This discussion suggests that the rise of productivity and putput has not been so great as is generally assumed; but the statistics of output of basic materials and services also suggest large improvements. An examination of the Fourth Five-Year Plan reveals at every step how great an importance the Russians attach to rises in productivity. Over-all national income in the years 1946 to 1950 was to rise by 48 per cent in stable prices, labor productivity by 36 per cent, and the amount of capital by 50 per cent. Within fifteen years steel output at 60 million tons and coal at 500 million tons were expected to compare favorably with the production of the United States.⁹ Obviously, these gains can come only in part out of a greater mobilization of workers, and in particular by forcing workers into the cities. A rise in productivity is the nub of the problem.

At every point the importance of rising productivity is made clear. A few examples follow:

⁸ Symposium on "An Appraisal of Russian Economic Statistics," by Messrs. Baran, Bergson, C. Clark, Harris, Gerschenkron, and Yugow in *Review of Economic Statistics*, Nov. 1947, pp. 213-46.

⁹ M. H. Dobb: "Post-war Economic Prospects in the U.S.S.R.," *Bulletin of the Oxford Institute of Statistics*, June 1946, pp. 192-8.

Among the objectives of the Fourth Five-Year Plan, the government would "raise the productivity of labor by making the utmost of the 8-hour working day, by the all-round mechanization of heavy labor-using branches of industry, by extending electrification in the national economy and by intensifying production processes."¹⁰

It was also necessary to enhance the significance of profits and cost-accounting as an additional stimulus to production; to increase the profitability of all branches of industry by lowering costs of production; to induce business organizations to pay greater attention to mobilizing their internal resources, observing scrupulous economy and resolutely eliminating losses due to bad management and unproductive expenditure; to increase the proportion of premiums for the fulfillment and over-fulfillment of output programs in the total earnings of workers and clerical employees. . . .

One of the major tasks of the coal industry is considerably to improve the quality of coal by concentration, screening and the manufacture of briquettes. Large-scale, technically up-to-date mechanized plants shall be established for the concentration, screening and briquetting of coal.¹¹

Under-Emphasis in the United States

In American official reports, little attention has been given to the problem of productivity. In the *First Annual Report of the Council of Economic Advisors*, productivity is not discussed. This might have been expected since the Employment Act concentrated on employment, not productivity. In the *Economic Report of the President* (January 8, 1947), it was stated that "labor, on its part, must recognize that high volume at low costs and low prices requires high productivity and the absence of restrictions on production." The President also focused attention on the need of utilizing the labor force in an efficient manner, and, in particular, by increasing mobility and improving counseling and training. Impressed by the gains of 3 per cent per year in man-hour output over the decades, which he associated with technological developments and a steady stream of additions to plant and equipment, the President urged private industry to expand the productive base of the economy, in addition to assuring adequate demand.¹²

In his *Midyear Report* the President elaborated further. He was clearly concerned over the recent rise in basic straight-time hourly wage rates in coal mining from \$1.18 to \$1.63, and he feared that this rise

¹⁰ *The Great Stalin Five-Year Plan*, p. 4.

¹¹ *Ibid.*, pp. 4, 6. (Paraphrased).

¹² Pp. 20, 24-5. In the January 1948 *Economic Report of the President* institutional aspects of productivity receive much attention. See pp. 121-138 of this volume.

might be the occasion for an epidemic of similar advances. Inflationary effects might be averted if the rise were offset by an increase in productivity. This increase of wages offered an opportunity to admonish both capital and labor against restriction of output.

Recognizing their common interest in common ends, they should do everything in their power to increase production so that the goals of maximum production, employment, and purchasing power can be continuously achieved.

. . . [businessmen] seek relief from business difficulties by limiting production, and they hope to avoid future business difficulties by limiting the capacity of their plants and industries and by withholding new production techniques. . . .

Labor, for its part, must root out a belief long held by some that the volume of work available is strictly limited, and that if they do it rapidly they will soon be out of a job because the work is finished. Make-work operations, feather-bedding, and soldiering on the job are practices that fall into the same category as limitations on production, capacity, and new techniques on the part of management.¹³

In the years 1945-47, wage disputes, more than any other factor, attracted attention to man-hour output. Clearly the country was much more concerned over the *distribution* of the national product than over its *volume*. In making wage agreements, it was necessary to guess at man-hour output, and therefore at the level of output. This level, in turn, depended on the smoothness of reconversion, including the avoidance of labor disputes and treatment of bottlenecks. Man-hour output on the whole was disappointing in the early post-war years.

Many had anticipated that the experience of the years 1919-22 would be repeated—a 10 per cent rise in man-hour output per year; or that, at least, man-hour output would rise by 3 per cent per year, as in the preceding 20 years (80 per cent compounded).¹⁴

¹³ *Midyear Economic Report of the President Transmitted to the Congress* (July 21, 1947), pp. 42-3.

¹⁴ For a discussion of technical difficulties arising in overall productivity indices, see W. D. Evans: *Recent Productivity Trends and Their Implications* (mimeographed, 1946), p. 13; Bureau of Labor Statistics: *Summary of Proceedings of Conference on Productivity* (1946); S. Kuznets: *National Product in Wartime* (National Bureau of Economic Research, 1945), passim; S. E. Harris: *Inflation and the American Economy* (1945), pp. 28-33.

In fact, Mr. Evans of the Bureau of Labor Statistics, a leading expert in this country, in 1946 predicted a productivity rise of one-third in manufacturing before 1950. In another interesting survey the Bureau of Labor Statistics estimated that from 1939 to 1950 the rise might be from 20 to 30 per cent for most industries. (This was not a prediction). The greatest percentage rise in manufacturing would be in chemicals and allied products (44), the smallest in non-ferrous metals and their products (14); in mining (25); transportation and public utilities (41-42); trade (19); finance, service, and miscellaneous (15); and construction (9). Bureau of Labor Statistics: *Full Employment Patterns, 1950* (1947), pp. 8-9.

It is not safe to project from past trends. Much depends upon the structure of industry. Old industries, for example, gain slowly, whereas new industries advance rapidly. Man-hour output in the airplane industry rose more than three times in three years; in the automobile industry, 134 per cent from 1919 to 1929, and only 19 per cent from 1929 to 1939; in rayon, productivity doubled from 1929 to 1934 and nearly doubled again from 1934 to 1939; but in the manufacture of bread and bakery products, the rise was only 3 per cent for the whole period 1924 to 1940. Another reason for accepting past trends with skepticism is related to the above. Service industries play an increasing role in our economic life; in these industries the technical advances are at a slow rate. Extending the productivity gains in manufacturing to the whole economy, many are disposed to exaggerate the increases in man-hour output. Again, caution must be exercised in projecting from past trends when unemployment in large doses was common, because of the adverse effects upon man-hour output associated with bottlenecks and lack of reserves symptomatic of the full employment economy, which may well become the prevailing type of economy.¹⁵

The Importance of Productivity in France and Other Countries

Concern with productivity is not limited to the countries discussed so far. The less satisfactory economic conditions are, the more attention is paid to productivity. In countries like the USSR, Czechoslovakia, Poland, Greece, and India, which are concerned with low standards of living, reduced further by war, the emphasis on productivity is unmistakable. In many of the countries with minimum standards, the discussion of productivity is related to that of industrialization, and to a general redistribution of manpower in favor of productive industries. In Czechoslovakia and Japan, for example, the waste of manpower in service and selling is a matter of particular emphasis; and even in the United Kingdom, the parasites who live off others receive special invectives from the Attlee Government. In the Beveridge book on *Full Employment*, Dr. Kaldor anticipated that a rise in output would be associated with a redistribution of labor in favor of productive industries and at the expense of service industries—to the accompaniment of full employment conditions.¹⁶ Any rise in man-hour output associated

¹⁵ I have discussed some aspects of these problems in my *Inflation and the American Economy*, Ch. VI and pp. 424-7. This book includes additional bibliography. Also see Report of Committee on Banking and Currency: *Basic Facts on Employment* (Sept. 1945), pp. 6-11; J. Backman: *Wages and Prices* (1947), Ch. III; Bureau of Labor Statistics: *Full Employment Patterns, 1950*, pp. 8-10.

¹⁶ Sir William Beveridge: *Full Employment in a Free Society* (1944), pp. 396-7.

with the re-allocation of labor and capital in favor of industry, even if it should contribute to a higher output per man-hour, is not the matter under consideration at this point.¹⁷

Of the major powers, France, in particular, has focused its planning camera on productivity. Modernization is on the title page of the Monnet Report and it is the theme, with variations, throughout the volume. In the pre-war period, it was observed, real income per capita was but one-third as large in France as in the United States. Commenting on the high income level in Holland, which has no iron, in Sweden which has no coal, in Switzerland and Denmark, which have neither coal nor steel, and in New Zealand, the Report concludes that the standard of living depends on technical advances, not on economic resources considered in an absolute manner. "While immigration and a longer working day will help in the short run, a rise in productivity is by far the most effective means of raising output in the long run." In the view of the Committee, France's technical capacity and the industry of her workers are the equal of those in any other country; but her capital is deficient and her productive process archaic. With the loss and deterioration of her capital, the withdrawal of resources by Germany, the deficiency of food supplies—accompanied as usual by absenteeism and reduction of productivity—efficiency declined further in the war.¹⁸

It was considered important for France to raise the level of productivity so that she might pay for her indispensable imports, and thus offset the loss of productive workers brought about by the aging of the population and by war losses—not to mention the over-staffing of government and distribution.¹⁹

The Bombay Plan for India proposed to treble the national income within a period of fifteen years and double the per capita income. (In the view of the authors of this plan, the rate of expansion was to be less than in the USSR in the years 1928-40.) This spectacular rise was to be achieved by the introduction of a balanced economy which would embrace the development of basic industries, and notably power; provision for adequate capital in industry; and improvement in agricultural methods, partly by amalgamating holdings.²⁰

¹⁷ Since the reward in tertiary (service) industries are higher than in primary and secondary industries—at least in modern capitalist societies—it might seem that man-hour output would not gain *pari passu* with the transfer of resources from tertiary to secondary industries (i.e. manufacturing). But, as has been observed elsewhere, the real wages paid in tertiary industries will depend largely upon output in primary and secondary industries; and if output in these industries is low, a rise in per-capita real income might not be had by shifting resources to the tertiary industries.

¹⁸ *Rapport Général sur le Premier Plan de Modernisation et d'Équipement*, pp. 12-13.

¹⁹ *Ibid.*, p. 19.

²⁰ *A Plan of Economic Development for India* (1944), pp. 27-40.

In Greece, too, productivity is an important issue. Virtually the entire report of the FAO is devoted to this problem, and, in particular, to raising output in agriculture, forestry, and fisheries. Industrialization, as usual, receives considerable attention. The long-range goal is to transform the area from a predominately agricultural country employing mostly primitive methods to a more industrialized country using efficient modern methods in agriculture and in industry.

Start a program of modernizing its own agricultural and other services to provide the facts, guidance, education, and fuller facilities necessary for its people to carry this program into action;

. . . give special attention to the improvement of agricultural methods, better utilization of water and soil resources, the encouragement of co-operative action by farmers and consumers, and the development of greater industrial activity and employment.²¹

Greece is an over-populated country; its farms are small, and the yield much below average. Arable land in acres per person of farm population was 1.31 (world average 1.90, the United States, 17.03), and yield in bushels (all grains) was 13.5 for Greece (as compared with 18.9 for the world, and 18.6 for the United States).²² Attention of outside experts is concentrated on raising output and finding more productive employment for the excess population.

Some General Remarks

Productivity is the concern of almost every planner; and the lower the standard of living, the greater the shortage of labor, and the greater the damage wrought by war, the more interest is shown in raising man-hour output. In this chapter the problem has been man-hour output, or more aptly, man-year output. Other ways of raising output, such as industrialization, expansion of production at the expense of parasitic industries, and expansion in the size of the labor force, are discussed in other parts of this book. A rise in man-year output, industry by industry, depends upon obtaining more capital—which will make modernization and replacement of old capital possible, and, where necessary, effect an increase in capital per worker; upon improvements in labor-capital relations; upon improved techniques, better management, better training and education, and removal of restraints on output by both management and labor. As has been made evident in the discussion of both the USSR and the United States, the measurement of productivity is, indeed, a stumbling block.

²¹ *Report of the FAO Mission for Greece (1947)*, p. 3; cf. Dept. of State Bulletin Supplement: *Aid to Greece and Turkey (1947)*, pp. 905-7.

²² *Report of the FAO Mission for Greece*, p. 155.

Industrialization, Output, and Finance

Numbers in Secondary and Tertiary Industries

RAPID industrialization is one of the prime objectives of many of the planned economies. An examination of the plans presented in this book will clearly show, for example, that for India and the Argentine industrialization is not merely a scaffolding to aid the building of the economy, but rather its very foundation. For Greece, Czechoslovakia, and Poland industrialization is to make important contributions to the growth of the economy. No historian of the USSR can be unaware of the decisive part played by industrialization in the growth of the Russian economy. Everywhere in Asia, Eastern Europe, and South America industrialization is the symbol of economic progress, and frequently of political and economic independence.

In the past, there has been a high correlation between industrialization and national income. Countries with a large proportion of their manpower in agriculture usually have a small per capita income; and as the proportion of labor in manufacturing and other secondary industries (e.g. public utilities) rises, incomes rise. With very few exceptions—the Argentine and Australia may be among them—the average worker in a factory can produce more than one on the farm. Similar relations between high income and industrialization will be found among the states of the United States. C. Clark, A. J. Brown, L. H. Bean, and the League of Nations, among others, have dwelt upon these relationships.¹

¹ C. Clark: *The Conditions of Economic Progress* (1940), Chs. 5, 7-9, and *The Economics of 1960* (1942), pp. 70-1 and appendix; A. J. Brown: *Industrialization*

An indication of the association of high income with industrialization may be had from this table:

INDUSTRIALIZATION AND INCOMES ²

	<i>Real income per head of the population, 1935-38, in international units per 2500 hours of work</i>	<i>% Population gainfully occupied in secondary in- dustries (most recent census before war)</i>
A. Industrialized Countries		
1. United Kingdom	584	44
2. United States	545	31
3. Switzerland	455	45
4. Germany-Austria	343	39
B. Non-Industrialized Countries		
1. China, etc.	44 (1925-29)	5
2. India, etc.	64 (1925-29)	14
3. Poland	117	18
4. Portugal	125	18

A time comes in the development of industrial nations when the proportion of tertiary workers (e.g., services, government) begins to rise at the expense of both primary (agriculture, mining) and secondary industries. As technology progresses and standards of living rise, the necessary supplies of material goods are obtained with reduced amounts of labor and require a declining percentage of income; the demand for services of various types and the available supply of labor grows. It is not surprising, therefore, that the highest per capita incomes are found in countries with the largest proportion of employment in tertiary industries. In the pre-war years the percentage of workers in tertiary industries in the United States was 50; in the United Kingdom, 50; in Germany, 37; in Switzerland, 33. For China, India, and Poland, the respective figures were 20, 23 and 20.³

In a sense, then, advanced countries ultimately reach a stage of de-industrialization. Unless they can find work for the growing population and those displaced by technological improvements, a serious unemployment problem will set in. Hence the growing emphasis on distribution, public investment, education, and the like.

Those who are attracted by the importance of tertiary industries should never lose sight of the fact that the contribution of tertiary industries depends upon the availability and productive capacity of

and Trade (1943), especially Chs. 2-3; League of Nations: *Industrialization and Foreign Trade* (1945), Chs. 2-4; L. H. Bean: "International Industrialization and Per Capita Income," in National Bureau of Economic Research: *Studies in Income and Wealth*, Vol. 8 (1946), pp. 122-40.

² Adapted from C. Clark: *The Economics of 1960*, pp. 70-1 and app. table.

³ *Ibid.*, pp. 70-1.

primary and secondary industries. Unless the latter yield large output per man-hour, incomes in the tertiary industries will not be high. High productivity in primary and, especially, secondary industries sets the tone in the tertiary industries. Unless the secondary industries yield large output per man-hour, they cannot pay high wages; and the developing tertiary industries, which tempt workers away from the secondary industries, will pay more than the latter but an excess above a *low* level in manufacturing and related industries. If man-hour output is low in secondary industries, the real wage rate will necessarily be low in tertiary industries, for workers in these industries will find their material purchases expensive. Ordinarily, as the tertiary industries grow, incomes in this group rise above those in the secondary industries; but ultimately, as in response to the greater rewards, workers and professional men and women flock to these industries, the excess pay in the tertiary industries is gradually whittled down.

High pay and high incomes in tertiary industries stem from the high productivity in manufacturing industries; and the high incomes in countries with large proportions of tertiary workers may wrongly be interpreted as a result of high productivity of these workers, whereas, in fact, the influx into tertiary industries is based on, and originates in high productivity in manufacturing. In the tertiary industries (e.g., selling, distribution, government, education), the assembly line method of production cannot be used, and these economies of large scale output are not, as a rule, of great importance; there, nevertheless, over the last few generations, incomes per capita have been high. This brings me to an important problem raised by the plans under consideration in this volume. In several countries, the emphasis is put upon conservation of manpower. It is proposed to shunt labor to primary and secondary industries, at the expense of tertiary industries. The British, French, Czechoslovakian, and Greek plans, for example, emphasize the importance of reducing tertiary employment. In view of the high direct correlation of income per capita and the proportion of the working population in tertiary employment, the economic architects for these countries might be criticized for their abysmal ignorance of statistical correlations. Actually, they are quite correct in their reluctance to absorb too many workers in tertiary industries. Knowing that tinkering with a speedometer so that it shows 60 miles when the car is traveling only 40 miles does not actually get the passengers to their destination faster, they are similarly aware of the fact that keeping excessive numbers of workers in tertiary industries when the farms and factories are short of workers and output and productivity are low, is not going to provide their countries with high incomes. *They would, indeed, be correlation robots if they tried to maintain a large proportion of tertiary workers in the deficient European economies of the late forties merely because they have learned*

that countries with large proportions of tertiary workers generally are high-income countries. The more deficient the output of the basic industries, the lower the standard of living; and the greater the competition for limited supplies, the more parasitic are the tertiary workers who might be more effectively used to produce bread, shoes, machines, and housing, rather than services which are not absolutely essential.

A completely controlled economy like that of the Russians does not permit workers to pour into unproductive tertiary industries so long as serious shortages prevail in mining and industry. In contrast, the British semi-planned economy of 1946-47 allowed a price structure to develop, which, in the absence of manpower control, resulted in wasteful use of manpower in selling, entertainment and similar occupations.⁴

Industrialization and Trade

In the inter-war period industrialization in backward countries had an unfortunate effect on some advanced industrial nations, and, in particular, upon the United Kingdom. The great British economist Marshall, considering the growth of trade between Great Britain and Germany as the latter's manufacturing industries grew, had commented earlier upon increased trade between highly industrialized nations. In a recent study, the League of Nations found much evidence of concomitant expansion of manufacturing and foreign trade in manufactured products. The relationship, which is based on the assumption that industrialization raises income and that at higher incomes more trading is done, is not so simple as Marshall had envisaged. In Marshall's day, protectionism had not attained its current diabolical forms. Recently, A. J. Brown pointed out that although increased incomes bring more trade, the industrialization process in itself evokes high protectionist measures. Even the authors of the League of Nations report had to admit that the thesis of the concomitant variation of trade in manufactured products and industrialization (undoubtedly trade in primary products increases) was not borne out by the experience of the thirties.⁵

Countries embarking on industrialization programs, as was made evident in the 1946-47 discussions of the charter for the ITO, are inclined to rely heavily on trade restrictions. In the 1946 proposed charter, for example, the following statement was made:

Members recognize that the industrial and general economic development of all countries and in particular of those countries whose resources are as yet relatively undeveloped will improve opportunities

⁴ *Economic Survey for 1947*, p. 33; *National Income and Expenditure of the United Kingdom, 1938 to 1946*, Table 26.

⁵ *Industrialization and Foreign Trade*, pp. 76-81.

for employment, enhance the productivity of labor, increase the demand for goods and services, contribute to economic stability, expand international trade and raise levels of real income, thus strengthening the ties of international understanding and accord.⁶

Article 12 recognizes "that progressive economic development is dependent upon the availability of (a) adequate supplies of capital funds; and (b) materials, equipment, advanced technology, trained workers and managerial skills." Members agree to impose no unreasonable impediments that would interfere with other members attaining the required factors; and the latter agree to abide by their international obligations.

Article 13, however, makes clear that governmental assistance, inclusive of protectionist devices, is a legitimate weapon for establishing industries. It is pointed out that "members recognize that an unwise use of such protection would impose undue burdens on their own economies and unwarranted restrictions on international trade and might increase unnecessarily the difficulties of adjustment for the economies of other countries." Nevertheless, the charter to some extent provided for brushing aside the obligations it imposed when exceptions should be made to further industrialization.⁷

In its five-year plan, parts of which are presented later, the Argentine government would raise tariffs and impose quotas in order to put Argentine infant industries on a competitive basis; would impose "defensive" duties to contend with dumping; would favor the importation of raw materials, machines, and other items required for industrialization by reducing tariffs and setting low exchange rates (low peso price for foreign currencies), and stimulate the exportation of highly fabricated commodities by fixing high exchange rates (each dollar would be exchanged for many pesos); would protect the domestic market against local monopolies in essential materials by adjusting imports; and, when domestic production of industrial products formed a small part of total sales, would subsidize their production, with the revenues provided by a small increase in tariffs. In short, the government announced its intention of having recourse to almost every known protectionist device in order to accelerate industrialization—and many of the measures had been put into effect even before the plan was announced.⁸

Objectives

In general, the objective of industrialization is to raise output and national income. More specifically, it is to move population from farm

⁶ *Report of the First Session of the Preparatory Committee of the United Nations Conference on Trade and Employment* (London, Oct. 1946), p. 27.

⁷ *Ibid.*, p. 28.

⁸ *Plan De Gobierno, 1947-1951*, Vol. I (1946), pp. 362-4.

to factory, to find employment for excess population, and to raise the output per man-hour or man-year.

In India, for example, industry, agriculture, and services had contributed 17, 53, and 22 per cent of the national income, respectively, in 1931-32; the Bombay Plan of 1944 proposed a distribution of 35, 40, and 20 per cent. Within fifteen years industry's ratio of output was to double and agriculture's to decline by one quarter. In *absolute amounts*, industry's production was to rise by 500 per cent, that of the services by 200 per cent, and that of agriculture by 130 per cent. As usual, the concentration was to be on basic industries: power, iron and steel, engineering, chemicals.⁹

In the USSR the objective, again, is to raise the standard of living, although up to the present the increased output has been diverted disproportionately to capital and military purposes. In its most recent five-year plan (1946-50), the Government expresses the following views on industrialization:

This epoch-making victory could only be achieved because the whole country had been made ready for defense beforehand. Three five-year plans of development of the national economy of the USSR were required in preparation for the tremendous task.

The Soviet Union created the material conditions which made it possible to prepare the country for active defense before it entered the Second World War by consistently carrying out the policies of the Communist Party, and, first and foremost, with the help of the Soviet policy of industrializing the country and collectivizing agriculture. . . .

The 18th Congress of the Communist Party of the Soviet Union (CPSU) in 1939 laid down the lines for a gradual transition from socialism to communism and set before the peoples of the Soviet Union the aim of overtaking and outstripping the principal capitalist countries economically, i.e., with respect to the volume of industrial output per head of the population.¹⁰

Then the document goes on to say that the groundwork for the development of the economy had been laid in the Third Five-Year Plan; that socialist industry had made rapid strides prior to the war—with industrial output rising by 13 per cent a year, within three years output of the means of production rising by more than 50 per cent, and that of the machine-building industry by 75 per cent; that the development of heavy industry, the development of eastern areas, and the accumulation of large reserves of materials helped to strengthen the economic and military might of the nation. Expansion of industry in the East under the five-year plans, along with the rapid re-establishment of more than

⁹ *A Plan of Economic Development for India* (1944), pp. 29-30.

¹⁰ *The Great Stalin Five-Year Plan*, p. 2.

1,300 large industrial plants evacuated from the West and new construction, helped to strengthen and broaden the powerful industrial base in the East.

Objectives of the new five-year plan included priority to the restoration of heavy industry and railway transportation; formation of technical programs in all branches of the national economy as a condition for the rise in output and productivity; surpassing the pre-war volume of national income and national consumption; assurance of permanent staffs of workers for industry and transportation, through an improvement in living, material conditions, and better training; reduction of costs and the search for economies; and increased mobility.¹¹

Industrialization, indeed, had made extraordinary progress in the years before the war. Their rate of industrialization may well have exceeded that of any other country. According to the League of Nations, the proportion of the world's manufacturing output in the USSR rose from 4.3 per cent in 1926/29 to 18.5 per cent in 1936/38; in the same period, United States production had declined from 42.2 to 32.2 per cent of the world's total. (USSR figures are, however, subject to severe reservations, as noted elsewhere in this volume.) Whereas world manufacturing output had risen by 33 per cent from 1926/29 to 1936/38, that of the USSR had expanded by 474 per cent. Since their import trade had grown by 3 per cent, clearly industrialization and trade had not moved together in the USSR.¹²

Gains of the USSR were large, even if allowance is made for the upward bias in the production index. Output of basic commodities expanded greatly—proof of industrial progress. Transfer of workers played a significant part: the numbers in industry rose from 11.6 million in 1928 to 27.8 million in 1938; and the percentage of workers in factories and offices to total population of working age rose from 14.4 per cent in 1929 to 29.3 per cent in 1939. Official Russian figures yield an average rise in output per man-hour of 13 per cent in the five years beginning in 1933. Increased training of workers, engineers, and managers; voluntary and forced movements of labor to factories; provision of large amounts of capital allocated out of current output; and rising productivity—these factors explain the important gains in industrial output. As might be expected, the government favored industry at the expense of agriculture, and industries crucial for industrialization over

¹¹ *Ibid.*, pp. 3-4.

¹² *Industrialization and Foreign Trade*, pp. 13, 85. Mr. Gerschenkron states that for 1913 Russian statisticians have calculated the USSR industrial output to have amounted to 6.9 per cent of that of the United States; on this basis he computes the 1938 USSR output as 45.1 per cent of American output in the same year. However, taking into account the overvaluation of the Russian index, Mr. Gerschenkron finds it difficult to believe that in 1938 the USSR industrial output was more than 35 per cent of that in the United States.

others. In 1913, agricultural output was 164 per cent of industrial output; by 1937, it had fallen to 29 per cent. The significance of this comparison is affected, of course, by the pricing system used in both years. The share of selected industries in total output of large-scale industry was as follows:¹³

U.S.S.R. OUTPUT OF INDIVIDUAL BRANCHES OF INDUSTRIES,
1928 AND 1936

(as percentage of total)¹⁴

I.	<i>Basic Industrial Materials</i>	1928	1936
	Coal	2.4	1.9
	Oil	4.3	2.6
	Ferrous Metals	4.7	4.8
	Non-Ferrous Metals	1.4	1.5
II.	<i>Consumption Industries</i>		
	Cotton Textiles	17.1	6.2
	Wool	3.3	1.2
	Foodstuff Industries	22.3	17.2
III.	<i>Heavy Processing Industries</i>		
	Metal Working Industries	13.5	32.5
	Machinery	11.0	26.9
	Chemicals	2.3	4.2

In the Argentine plan, the government elaborated on the need for industrialization. First, it considered political reasons: the guarantee of economic and political independence; support of the material and normal advance of the nation; attainment of economic equilibrium which follows decentralization, and with it political equilibrium; increased resistance to foreign loans; the strengthening of the national defense. Second, it suggested social reasons: the avoidance of unemployment after the war; a rise in the level of employment, which would make possible the absorption of new workers associated with the natural increase of population and immigration; a rise in the standard of living, accompanying the industrialization. Third, it enlarged upon the economic effects: an increase of national income, improved distribution, the provision of a market for excess production of agricultural and livestock products, the stabilization of prices, and the increase of domestic capital facilities. Finally, financial gains, it held, would include independence and stability, increase of productive investments, and the widening of sources of governmental revenues independent of fluctuations of foreign trade.¹⁵

¹³ Figures in this paragraph from A. Baykov: *The Development of the Soviet Economic System* (1945), pp. 290, 343-4; A. Yugow: *Russia's Economic Front for War and Peace*, p. 159; and an unpublished paper by Dr. Gerschenkron.

¹⁴ Material from unpublished paper by Dr. Gerschenkron.

¹⁵ *Plan De Gobierno, 1947-51*, Vol. I, p. 359.

Greece is another country intensely interested in industrialization. Its unemployed and partly employed population is large. Technological advances in farming and the natural increase of population will further increase the numbers unemployed. The FAO report proposes a redistribution of the working population, with agriculture's shares being reduced from 60 to 40 per cent. With the advance of industry, more jobs will be made available, and the demand for agricultural products will rise. When the population is large in relation to the natural resources, the case for industrialization is strong indeed—as it is in all countries of the eastern Mediterranean. In these countries, the Malthusian specter depresses the standard of living; and tasks must be found for the population other than crowding the land. Arable land per person of farm population in Greece was but 1.31 acres. Even Hungary (2.94), Roumania (2.54), and Poland (2.22) had more land relative to population than Greece. In order to achieve the desired degree of industrialization, Greece has to have more capital, better education, improved health, technical and financial assistance from abroad, and an improvement of the tax structure which now impairs her export position and hence her ability to pay for imports.¹⁶

The Proposed Rise in Output

Under its five-year plan Argentina proposes to raise the annual output of industry by 1951 to 43.3 per cent above that of 1943, salaries and wages by 52.8 per cent, employment by 34 per cent, and installed horsepower by 50 per cent. In the course of the five years, the government proposes a large expansion in the output of raw materials: raw cotton, 27 per cent; wool, 40 per cent; book and other paper, 90 per cent; steel ingots, 162 per cent; lead, 9 per cent; zinc, 200 per cent; aluminum, 17 per cent.¹⁷

India's plan, it will be recalled, anticipates a three-fold rise of national income within a period of fifteen years from the time the plan is put into operation. (The rise is in relation to 1931-32). Per capita income would only double, however; and, as noted above, total industrial output is to rise by 500 per cent.¹⁸

In planning for 1946, the French Monnet Plan required that by the end of that year national output should once more be at the 1938 level. (In the middle of 1946, industrial output was 22 per cent less than 1938 output.)¹⁹ By 1948 the French plan called for a further rise of 25 per cent in output, which would bring it to the 1929 level; and by 1950,

¹⁶ *Report of the FAO Mission for Greece*, pp. 21-3, 55-8, 155, 162-3.

¹⁷ *Plan De Gobierno, 1947-1951*, Vol. I, pp. 361-2.

¹⁸ *Plan of Economic Development for India*, pp. 28-30.

¹⁹ By early 1947, it was more than 90 per cent of pre-war figures.

25 per cent additional. Industrial output would then be 100 per cent above that of June 1946, and more than 300 per cent above that of the first half of 1945. (This is based on the assumption that industrial output would rise only as much as total output.)

The rise in energy from 1938 to 1950 was to be almost 40 per cent; consumption of steel, 80 per cent; production of coal, close to 40 per cent; cement, almost 250 per cent; ton-miles of railway transportation, more than 80 per cent; output of machine tools, 200 per cent; of automobiles, more than 80 per cent; of cotton textiles, almost 30 per cent; of machines, almost 70 per cent; of silk in royons (tissues), more than 80 per cent; and of buildings and public works, 150 per cent.

Other statistical material also shows that industry was to gain disproportionately. For example, the total number of workers (exclusive of services) was to be 200,000 ($1\frac{1}{2}$ per cent) less in 1950 than in 1938. Agriculture was to carry on with 900,000 (13 per cent) less workers, whereas metal production was to gain 270,000 (18 per cent), power industry 149,000 (45 per cent), and building and public works 280,000 (29 per cent).²⁰

Czechoslovakia's plan requires industrial production to rise sufficiently so that by the end of 1948 it will exceed pre-war production by 10 per cent. The planners urge that particular attention be paid to the basic industries:

1. *Hard Coal* output is to be 16.7 million tons or 17 per cent more than production in the first half of 1946.

2. *Brown Coal* output is to be 23.9 million tons or a rise of 21 per cent over current output, and 33 per cent over 1937 output.

3. *Smelting pig-iron*: 1.4 million tons, a rise of 36 per cent over 1946 output, but below pre-war.

4. *Power*: Output of electricity should increase to 7.4 billion kw hours, a rise of 35 per cent compared with present output, and 75 per cent compared with pre-war output.

5. *Engineering Industries*: The percentage rise should be as follows: railway trucks, 150 per cent over present output and 7 per cent over 1937; railway locomotives, 100 per cent in excess of present output and more than 300 per cent in excess of 1937 output; agricultural machinery, 83 per cent in excess of present output.

6. *Chemical Industry*: Rise of 69 per cent over pre-war which will bring output up to pre-war consumption.²¹

The Polish economic plan proposes:

The per capita production of consumer goods in 1949 should considerably exceed the level of 1938. The index of per capita production in 1949 should reach 125. (1938=100)

The per capita production of producer goods should exceed twice

²⁰ *Premier Plan de Modernisation et d'Equipement* (1946-47), pp. 20, 37.

²¹ *Statement of Policy of Mr. Gottwald's Government*, pp. 13-15, 35-8.

the per capita production of these goods in 1938, due to a considerable increase in the production of coal and electric energy. The index of per capita production of producer goods should be 250 in 1949. (1938=100)²²

A rise of production of 48 per cent over 1940 volume of output is the goal set for 1950 by the USSR. By 1950 and 1965 respectively, oil production is to be 17 and 102 per cent above 1940 output; coal, 70 and 241 per cent; pig iron, 30 and 235 per cent; steel, 33 and 214 per cent. Total production in 1945 seems to have been about 10 per cent or more below that of 1940. The USSR now proposes an annual rate of industrial growth of 10 per cent under her Fourth Five-Year Plan, as compared with an annual rise of 20, 17, and 13 per cent in the first, second, and third five-year plans—and this despite the great destruction of capital in the war.²³

Where Is the Money to Come From?

Programs to industrialize at rapid rates require capital in large amounts, and when destruction of capital or delay in maintaining it as a result of war has been large, the shortage becomes even more serious. Many of the countries intent upon industrialization are, moreover, so short of consumption goods that the sacrifice of consumption industries to the goal of industrialization is painful, indeed. Continued demands of the military do not help matters. These countries seek foreign aid and in particular, American help. Insofar as they can obtain consumer and capital goods from the United States, they can industrialize without sacrificing consumption standards or increasing hours of work. In November 1947, the President's Committee on Foreign Aid warned Europe that she would have to arrest her rate of capital development.

In the last quarter of the nineteenth century, the Russians had attained about 5 per cent of their gross output through foreign loans. They will be fortunate, indeed, if they obtain as much as 1 per cent in the course of the Fourth Five-Year Plan. Significant bottlenecks, particularly in basic materials, may be treated through imports; but the imports will have to be paid for with gold, wheat, platinum, caviar, and other Russian exports. Finance in the Russian economy will have to be provided through voluntary savings and through compulsory savings imposed by the creation of money, supplemented by the use of the tax power.

France will depend more on foreign aid, though in the main she will tap her domestic capital market and rely upon monetary creation. With

²² *Polish National Economic Plan*, p. 9.

²³ *The Great Stalin Five-Year Plan*, pp. 6-7.

a doubling of her income, Greece should be able to save 10 per cent of her annual income; but in the next few years, reliance will be had primarily on foreign loans and aid. The Argentine's industrialization program does not rest significantly on foreign loans; in fact, one of its objectives is to free the economy from servility to foreign lenders.

Other countries look upon monetary stabilization as the road to increased savings. Investment funds in Czechoslovakia are to come from the internal funds of business, from bank credits, and public funds. Poland requires large credits to finance imports of food and raw materials but also "new methods are required to drain surplus money from the money market, and to improve further the taxation system during 1947 in order to mobilize large financial resources for taxation purposes. The currency and credit system should be based on the development of a suitable technique for the sterilization of the money market, taking into account the conversion of former German property into liquid funds."²⁴

Under the Bombay plan, £7.5 billion were needed, the main items being £3.4 billion for industry, £1.7 billion for housing, £0.9 billion for agriculture. Hoarded wealth was to provide £225 million; securities, £750 million; a favorable balance of trade, £450 million; foreign borrowing, £525 million; savings, £3 billion; and created money, £2.5 billion. Domestic resources, it will be observed, would provide £5.7 billion, or about three-quarters of the capital required. It should be noted, however, that the means of reimbursing investors and exporters in rupees for £1.7 billion are still to be found. Compensation for dollars and sterling turned over requires additional monetary expansion, unless the recipients turn the rupees exchanged for them over to the government or the capital market.²⁵

Norway is another interesting case study. Not nearly so intent upon industrialization as other nations discussed in this chapter, Norway, nevertheless, is determined to allocate resources disproportionately to capital. In its 1947 budget there is provision made for a rise of product of 1,450 million kroner: 750 million from additional output and 700 millions out of imported goods and services. These 1,450 million kroner will be used as follows: 200 for additional consumption; 700 million for additional public and private investment; and 550 for increased exports of goods and services. In all, investment should absorb 2,000 million kroner, to be financed by savings (53 per cent) and by a deficit in the balance of payments (47 per cent).²⁶

Since writing the above, Dr. Klein in an informative and stimulating

²⁴ *Polish National Economic Plan*, p. 25.

²⁵ *A Plan for Economic Development for India*, pp. 51, 55-6.

²⁶ Summary of St. meld No. 10 *Om Nasjonalbudsjettet 1947*, (The Norwegian National Budget for 1947), pp. 12-13.

essay has explored Norwegian planning: On the whole he seems well pleased with the results. Indeed in the 1947 budget, the planners seriously had underestimated imports and overestimated housing expenditures; but amends are made in the 1948 budget. The government depends on direct and indirect controls to achieve their objectives and, in Dr. Klein's view, relies too much on the latter. At least the planners have given Norway a uniquely stabilized economy, with improved distribution; and in Dr. Klein's view, the government is not content with diagnosis and prognosis as is the United States; but also has a program.²⁷

Final Comments

(a) Industrialization is a complex and costly process. Capital, raw materials, trained labor, power, and managerial capacity are the essential ingredients out of which the industrialization cocktail is mixed. Many countries seem to face almost insuperable obstacles in achieving an advanced industrial stage. In eastern Europe, for example, shortage of capital, unavailability of raw materials, lag in technical education, low standards of living and inadequate export potential to pay for necessary imports of raw material and capital—all are obstacles to industrialization. Even these countries, however, may make substantial progress if they can obtain foreign help over a number of years to press their program with the aid of foreign machinery and raw materials; ultimately they may repay out of rising incomes and export potentials. *When the pressure of population on natural resources is great, the Malthusian specter can be erased only by population control, migration, and industrialization—one, two, or all of these; and the last without population measures may not be effective in some countries.* Countries intent upon industrialization may also have to control the movement of capital and labor on the Russian model, and, at least temporarily, rely on protection on the Russian or Argentine model.

In possession of rich natural resources required for an advanced industrial nation, the USSR and the United States are in a particularly advantageous position. No other country is to be found which does not lack a major resource like coal, iron, oil, or other major raw material. Even the British Isles are short of food, raw cotton, and wool, and Germany of iron. Transportation and power resources are frequently the most serious bottlenecks, although if adequate capital were made available, these might lend themselves to treatment. China, India, Brazil, Argentina, Poland, Italy, Japan, and *a fortiori*, smaller countries planning industrialization suffer from serious shortages. Industrialization

²⁷ L. R. Klein, "Planned Economy in Norway," *American Economic Review*, December, 1948, pp. 795-814.

on a large scale will not be possible in these countries in the absence of relatively free capital movements and substantial foreign trade.

(b) In the past, industrialization has brought higher incomes; but there are important offsets which should not be left out of account. First, the gains of newly industrialized countries seem to have injured the older industrialized countries, as an examination of British economic history of the last generation or even that of New England will show. Second, *the universal trek to the cities on a world-wide basis may in itself change the terms of trade in favor of the farmer, and one of the potential gains of industrialization will be lost.* Migration to the city and factory reflects the unsatisfactory relative income on the farms, as well as the unfavorable terms of trade: the farmer receives relatively little in factory products in exchange for his products.

Third, an even more important consideration is the following. Over the ages the energy given forth by the sun has provided the world with large resources which are being used up at a vastly more rapid rate than sources of energy (e.g., coal and oil) are being accumulated. Industrialization, in the absence of population control, tends to accelerate the wastage. *With population in excess of 2 billions today, and with a further increase of a billion by the end of the century, the exploitation of wasting assets promises national bankruptcy unless means are found to harness the energy of the sun or wind and (or), as Huxley suggests, means are found for producing food artificially, e.g., through the synthesis of chlorophyll and the conversion of many agricultural wastes into nutrient solutions.* In the absence of radical advances, industrialization and the accompanying rise in population and consumption of natural resources will further despoil future generations.

(c) *The Russian example has certainly contributed to the intense interest in industrialization. Russia, indeed, achieved the transition from an agricultural to a fairly advanced industrial state in a fraction of the time required by older industrial nations.*²⁸

Granted that the advance by the USSR may well be unprecedented, it is, nevertheless, well not to exaggerate the gains. It will be recalled that both because new industries were inserted into the production index at current prices instead of the lower 1926-27 prices, and because coverage increased with time, official statistics exaggerated the rise of output and of industrial output. Moreover, as Dr. Gerschenkron shows by examining the anticipated rise in Russian output of basic materials in relation to past United States output of these items, the gains in output anticipated by the USSR for 1960 are also larger than are likely to

²⁸ A table compiled by Dr. Ezekiel gives some indication of the remarkable advance by the USSR. Cf. Chapter XIII, pp. 316-18. Their industrialization over ten years equaled that of 40-60 years of other nations.

be achieved.²⁹ Those who would follow the footsteps of the Russian planners should also be reminded that the achievements were had in part by forcing men and women into the factories, and by the issue of all-pervasive plans, which made the workers and managers toil long hours and diverted excessive proportions of the fruits of labor to capital and the support of a large bureaucracy.

(d) Finally, financial and monetary aspects of the problems require study. Countries with inadequate supplies of capital and unable to tap foreign sources of capital, are likely to be dependent upon forced savings. Voluntary savings will contribute little in the countries seeking industrialization; for they are generally poor countries. The forced savings will derive from monetary expansion and rising prices, which force unproductive consumers out of the market for labor and materials, in favor of the entrepreneur, private or public. Latin American countries in the past have especially relied on this type of savings;³⁰ and the USSR has not spurned it. In addition, the latter uses its tax system—in particular, the turnover tax—as well as its allocation of economic resources to force the public to cut consumption relative to output, and thus to impose social savings at the expense of the individual. Higher prices or sterilized cash are by-products of the system, and increased capital the result.

²⁹ "An appraisal of Russian Economic Statistics," *Review of Economic Statistics*, Nov. 1947.

³⁰ Cf. my *Economic Problems of Latin America* (1944), Ch. I.

Inflation and Related Problems

Introduction

INFLATION is a disease which almost invariably appears in war times, and even more so in post-war years. The occasion is an excess of purchasing power relative to the supplies of goods made available to those in possession of the purchasing power. Unless heroic measures are taken to remove excess purchasing power through a vigorous tax program and savings campaigns, the excess will be too large to be treated by price and related controls. This country, for example, produced \$211 billion of commodities and services in 1944, with a corresponding flow of income payments; but only \$110 billion of civilian goods and services were made available—about 100 billion went for war.¹ A serious inflation would have developed irrespective of the controls introduced, had not at least two-thirds of the excess of income over consumption goods available at stable prices been removed through taxes and savings programs.

Countries deprived of goods were especially vulnerable to inflationary forces. Latin American countries, for example, with small expenditures for defense and war, experienced a price inflation during the

¹ *Midyear Economic Report of the President* (July 21, 1947), p. 61. I have discussed these and related problems in a half dozen books; see especially *Price and Related Controls in the United States* (1945) and *Inflation and the American Economy* (1945).

war and the early post-war at least twice as great as that in the United States.² In no small part, the explanation was the large rise in exports to the Allies, restrictions on exports by the warring nations, accumulation of dollars, £ sterling and gold with the growing excess of exports, against which domestic currency was issued to exporters. With reduced supplies available as a result of expansion of exports, and a decline of imports, and with a marked expansion of purchasing power, prices rose greatly.

Other countries experienced larger degrees of inflation because they suffered from more serious deprivations. Withdrawals of goods by the Germans during the war (e.g., Greece) or reparation payments to Russia (e.g., Hungary) and the breakdown of economies as a result of war (e.g., Greece and, to a lesser extent, France and Italy), or inundation of credit and currency in payment for goods and services (e.g., Greece and, to a lesser extent, Belgium and France) helped to bring about an advanced degree of inflation.

Concern with inflation originates in the unfavorable effects upon low income groups whose incomes do not respond to rising prices, and, therefore, with maldistribution; in the ensuing unfortunate relations between capital and labor; in the difficulties raised for the Treasury in countries where resources do not respond well to rising prices, and in all countries where inflation reaches an advanced stage;³ in the increased propensity to hoard goods and keep them off the market; in the disappearance of working capital; in the growth of parasitic and unproductive middlemen and speculators; in short, in the ultimate collapse of the economy.

It is no wonder that, as we shall see, the planners are interested in inflation. But we should note here that the USSR, though concerned with inflation did not discuss it in its five-year plan. The outside world is not informed of price movements within that country. Undoubtedly, the vast network of Russian controls, vigorously enforced, reduces price rises. The reduced purchasing power of the rouble is, then, reflected not in rising prices, but in the decline in the proportion of available roubles that might be spent. Any system of price and rationing controls lessens purchasing power by reducing the ratio of currency spendable to the amount outstanding, in contrast with the fall in value for *all units* reflected in rising prices in a *free* economy. In the winter of 1947-48,

² Cf. my *Economic Problems of Latin America* (1944), Ch. I; and the editor's unpublished reports (on deposit at the State Department) to various Latin American Governments on their stabilization programs.

³ The difficulties encountered by the French Treasury are illuminating. In 1938, the deficit was 52 billion francs; in 1946, 392 billions; and in 1947, 600 billion (last estimate). Yet in 1938 prices, the deficit had grown (inclusive of capital items) only from 52 to 61 billion francs. Despite the vast rise in expenditures and responsibilities, the government raises little more in goods and services than in 1938. *Rapport Général sur le Premier Plan de Modernisation et d'Équipement*, p. 93; *Federal Reserve Bulletin*, April 1947, p. 358.

Russia made a vigorous direct attack: the government demonetized a large part of outstanding money and deposits.

Extent of Inflation

Perhaps the best manner of measuring inflation is the rise of prices. With January—June 1939 as 100, the cost of living of countries with moderate, substantial, and very large degrees of inflation is given below. (Unless otherwise indicated, the rise is as of the end of 1946.)

COST OF LIVING, 1946 ⁴	
(January-June 1939 = 100)	
A. <i>Moderate</i>	{ Australia, 126 (132)
	{ Canada, 126 (135)
	{ United Kingdom, 133 (132)
	{ South Africa, 135 (146)
	{ Sweden, 146 (160)
	{ Norway, 162 (164)
	{ Netherlands, 182 (Aug. 1946) (197)
B. <i>Substantial</i>	{ Peru, 216 (253)
	{ Brazil, 218 (231)
	{ Mexico, 301 (343)
	{ India, 269 (258)
	{ Czechoslovakia, 305 (312)
	{ Chile, 317 (383)
C. <i>Very Large</i>	{ France, 804 (1,068)
	{ Italy, 2,633 (5,050)
	{ Japan, 4,000 (June, 1946)

The above table does not show the extreme inflationary examples of recent years. China, Greece, and Hungary are perhaps the most tragic cases. In May—July 1946, the rise in Greek prices for six important domestic commodities and five important exports was *110 times* over pre-war; for eleven industrial products bought by farmers the rise averaged *309 times*.⁵ Hungary has undergone the most extreme degree of inflation known to the writer. The Assignat experience in the French Revolution, the classic case, with a fall in value of 99½ per cent, and even the German experience with a rise in the price of a dollar by 1,000 billion times were healthy currencies compared with the pengo.⁶

⁴ From *Monthly Bulletin of Statistics of the United Nations*, March 1947, pp. 91-7. Figures in parenthesis are for latest month in 1947 available; information provided by an international organization. The value of the U.S. dollar in Chinese Yuans was: 1939 = 13; 1945 = 1,350; Aug. 1947 = 44,500.

⁵ *Report of the FAO Mission for Greece*, p. 12.

⁶ Cf. S. E. Harris: *The Assignats* (1930), pp. 121-5, and F. D. Graham: *Exchange, Prices, and Production in Hyper-Inflation Germany, 1920-1923* (1930-31), p. 13.

In Hungary, the circulation rose ten-fold during the war, and 8 billion times from the beginning of the Russian occupation to the third week of June 1946. In the last three weeks the rise had been 1,200 times. The dollar value of the pengo rose 15 times during the war, almost 2 trillion times during the Russian occupation up to June 22, 1946, and 2 million times additional in the next 15 days. From the end of 1939 to June 30, 1946, the circulation in billions of pengos had risen 6,277,271,176,000,000,000,000 times (6.3×10^{21}), and the official exchange value of the dollar from 5.7 in December 1939 to 29,373,000,000,000,000,000,000 (2.94×10^{22}). By early July 1946, the dollar value of the total currency, despite the vast expansion in normal value, was but 2 per cent of the pre-war level. Scarcity of currency was genuine indeed.⁷

The Inflationary Process: Anglo-Saxon Countries

Having discussed the nature and extent of inflation, we now turn to the treatment of inflation in various plans. Many of them have little to say about inflation, its causes, and cures. In countries already suffering large doses of inflation, the problem received more space than in others.

In the United States and some Sterling countries, the treatment was rather brief. The *First Annual Report* of the Council of Economic Advisers dismissed the whole problem with a few brief comments on pent-up demand.⁸ The *Economic Report of the President* (January 8, 1947), contained a few comments on the rise of prices in 1946 and the failure of wages to keep pace. For the most part, the report dealt with measures required to maintain purchasing power through increased wages and reduced prices.⁹ Nor did the *Midyear Report of the President* in July 1947 deal adequately with the inflationary threat: its emphasis was on the need of voluntary price reductions, on the stimulus to higher prices given by backlog of demand, reduced savings, export demand, and the use of business savings. No overall treatment of the inflationary problem is to be found, although the Council gives its blessing to a program of federal surpluses and debt reduction. In January 1948, however, the President in his *Economic Report* analyzed inflationary forces and offered a comprehensive program to check them.¹⁰

British planners were more explicit on these matters.

Action taken by the government to maintain expenditure will be fruitless unless wages and prices are kept reasonably stable. . . . If we are to operate with success a policy for maintaining a high and

⁷ I am indebted to Dr. Herbert Furth of the Federal Reserve Board for providing me with facts on the Hungarian inflation.

⁸ Pp. 18-21.

⁹ Pp. 2-4, 10-11, 20-1.

¹⁰ *Economic Report*, July 21, 1947, pp. 11-12, 24-34; Jan. 1948, pp. 41-52.

stable level of employment, it will be essential that employers and workers should exercise moderation in wage matters so that increased expenditure provided at the onset of a depression may go to increase the volume of employment. . . .

Thus, the stability of these two elements [wages and prices] is a condition vital to the success of employment policy; and that condition can be realized only by the joint efforts of the Government, employers and organised labour. The Government for their part are prepared to do what they can to stabilise prices so as to avoid or mitigate changes not rendered inevitable by higher costs either of imports or of production at home. If, however, the cost of living is thus kept stable it must be regarded as the duty of both sides of industry to consider together all possible means of preventing a rise in the costs of production or distribution and so avoiding a rise in prices which is the initial step in the inflationary process."¹¹

In the British *Economic Survey for 1947* the inflation problem received little attention. At that time, with a semi-socialist government, the problem was dealt with largely through curtailment of demand: by allocating exports and imports, raw materials and capital; and by controlling the distribution of the nation's output between consumption and capital. It was admitted, indeed, that purchasing power was at unprecedented levels—though as a result of official measures, it was more evenly distributed than in the past; and it noted, further, that savings and taxes, which accounted for one-third of income in 1947 (as against one-sixth in pre-war years), must be large to keep excess purchasing power off the market.

In the Australian discussion, more attention was paid to inflation. Once full employment is attained, a rise of expenditures will bring inflation, not higher output, with adverse effects on the economy. "Australian Governments will need to study closely economic and financial trends in Australia and overseas and the extent to which the available measures of government policy are adequate to deal with this problem. There must be great emphasis on collaboration between Australian Governments and between Governments and private business, if we are to insure not only that full employment will be maintained but that it will be maintained without running into the dangers of inflation."

Wage policy also received much attention. It was considered necessary to assure workers a fair share of the gains of rising productivity, but also to preclude sectional pressures to raise wages, with resulting price spiralling and lack of real benefit accruing to any group. Real wages should be subject to periodic review.¹²

¹¹ White Paper on *Employment Policy* (1944), pp. 18-19.

¹² *Full Employment in Australia*, pp. 6, 9, 12.

Inflation: the Netherlands and Belgium

The Netherlands was greatly concerned with inflation. Since prices no longer reflected scarcities, it was the responsibility of the government to keep consumption down through rationing. Particularly must they keep demand for durable goods in check, since with current scarcities, the public was likely to over-estimate their present needs—failing to note that in purchasing durable goods they buy for both the present and the future. In the views of the Planning Bureau, it was essential that disposable income in excess of consumption goods should be taxed or saved; and insofar as voluntary saving was not adequate, the public should be forced to save. Those who were fortunate enough to have wealth must not be free to exchange it for liquid assets or for consumption goods: in view of the general impoverishment, those with wealth should not be allowed to maintain their former standard of living. Liquid assets should be allocated according to the social position of the person and the need for retrenchment: consumption in 1946 was to be but 74 per cent of that in 1938.¹³

As early as 1942, the Belgian Government-in-Exile not only expressed fears of inflation but even then proposed heroic measures to withdraw excess money and deposits from circulation. In the year 1942 and 1943, the Commission for the Study of Post-War Problems made definite suggestions for dealing with the inflationary threat. The cornerstone of the program was to be the calling in of all purchasing power, including German notes, and the definite demonetization, or at least blocking, of a substantial part. Since controls had prevented the excess of money from having its full effect, it would be possible to contract the circulation without inducing a serious deflation. How large the contraction should be would depend upon the circulation of money and goods, variables not easy to estimate in 1942 or 1943. It was even anticipated that should the occasion arise, money withdrawn might well be put into circulation again at low rates of interest on behalf of productive borrowers.¹⁴

By October 1944, the government took measures to deal with the excess of money along the lines suggested. In April 1945, the means of payments were divided as follows:

<i>Billion Francs</i>	
Free	107
Temporarily unavailable	39
Permanently blocked	64

¹³ *First Memorandum on the Central Economic Plan, 1946, and National Budget, 1947*, pp. 22-5, 37-9.

¹⁴ *Rapports de la Commission pour l'Etude des Problèmes d'Après-Guerre (1941-44)*, pp. 34-7, 78-81.

It had been estimated that the free circulation (excluding deposits in savings banks) had risen from 50 billion francs in 1932-38 to 90 billion francs in April 1945. In May 1945, the government proposed a gradual freeing of temporarily blocked cash and deposits *pari passu* with the revival of import trade and the resuscitation of the economy. In exchange for the permanently blocked money, the government proposed a forced loan at rates of interest of 1, 2, 3, and 3½ per cent in the years 1946, 1947, 1948, and 1949, respectively; and a redemption of 1 per cent per year.¹⁵

According to the Bank of Belgium, the Belgian government could not depend on the orthodox approaches to the inflation problem supported by Anglo-Saxon countries. The United States and Great Britain had been able to pursue a rational policy of mopping up excess purchasing power, for they had not suffered from invasion and the accompanying loss of goods and wealth. It was necessary for Belgium to reduce its monetary supplies and thus to bring its prices into equilibrium with those of the nations with which she traded.¹⁶

Advanced Inflation: France and Japan

Unlike the Belgians, the French were primarily interested in plans for allocating economic resources, not in monetary and fiscal measures. In this respect their planners looked Eastward rather than Westward.

Monnet and his colleagues urged measures to stabilize prices, however. They would, for example, balance the government's budget on current account; and allow imbalance on capital account. Without a balancing on current account, price stability would be in jeopardy.

What the French planners sought above all was the savings required to modernize industrial plant and to carry through the plan. For this purpose, it was necessary to assure price stability. With confidence in the monetary unit, the public would not seek liquidity excessively, nor invest excessively in materials and real estate, nor move capital out of the country. Rather, they would make their liquid assets available to industry, and thus reduce the strain on the capital market. The French would also depend on foreign loans and on the conversion of foreign securities, foreign exchange, and gold into dollars with which supplies might be purchased abroad. More capital would then be made available without a corresponding rise of savings or expansion of money. It would

¹⁵ M. G. Eyskens, *Ministre des Finances: Exposé Général de la Situation Financière et Plan d'Assainissement Monétaire et Financier* (May 16, 1945), pp. 7-15.

¹⁶ *Le Développement de l'Assainissement Monétaire* (Extrait du *Bulletin d'Information et de Documentation de la Banque Nationale de Belgique*, Février 1945), pp. 8-9.

be necessary, in addition, for those entitled to francs in exchange for foreign assets to invest them, not hoard or use them for consumption purposes. Price stability, it was said, was quite consistent with monetary expansion; but it was necessary to relate the monetary additions to the flow of savings and of new material for investment. It was also necessary, according to the Monnet Report, that consumers should be charged *only* for new materials and *interest and amortization* for expenditures for modernization: excessive charges for new capital would contribute towards higher prices. For 1947, the plan envisaged receipts of 70 billion francs from savings of agriculture and industry, 140-150 billions from foreign credits, gold, and foreign exchange, and 245-250 billions from personal savings (including newly created cash).¹⁷

In Japan, strenuous measures were taken to deal with the inflationary pressures, but without much success.

In March of last year, when the Government took measures to regulate the currency through the issue of the new Yen notes, necessary materials in stock were not so scarce as at present, and there was an excellent chance for the revival of our national economy. Nevertheless, no sign of productive improvement has since been observed, while danger from inflation has steadily grown bigger and our country now stands under great economic difficulty.¹⁸

The Japanese planners observed that there was a lack of balance in the budgets of the government, of business, of households. On all fronts, were deficits. On government account, the deficit was larger in May 1947, than in April—June, 1946. In the year preceding the issue of the report, the deficit was 40 per cent of public expenditures. Similarly, deficits were to be found in individual industries. Thus in March 1947, a ton of coal cost 612 yen at the mine, but the official price was only 346 yen; for a period of six months, deficits of iron and steel companies were 32.4 per cent of expenditures, less than half of which was made up by the government. Again, white-collar workers had monthly deficits from January 1947, to April 1947, which varied from 132 to 445 yen, and laborers' accounts varied from a surplus of 53 yen to a deficit of 341 yen. (These were apparently based on a comparison of income and the cost of a minimum budget.)

It is necessary to balance the budget of the nation, of enterprise, and individuals. The last might live on savings or on accumulated wealth to some extent; but if the nation does so, it is at the expense of resources and foreign loans. Furthermore, it was not easy to raise the taxes required to balance the budget in the current state of the economy. The

¹⁷ *Premier Plan de Modernisation et d'Equipement*, pp. 90-5, especially p. 94.

¹⁸ *Economic Condition of Japan, Official White Paper Submitted by the Japanese Government* (July 4, 1947).

nation's economy was being neglected—railroads, forests, river-banks all required attention.

In commenting on the budgetary problem, the report put the matter in colorful language.

Suppose that any person ordered to clean a room sweeps in all the dust under a desk. The room may appear clean enough to a careless observer. But it cannot be said to be really clean. This is also the case with the national economy. We must, first of all, grasp the reality of our national economy as a whole. If ordered to clean a room, we must not allow any dust to remain unswept under the desk, or behind the chest of drawers, or in any part of the room. [All parts of the economy require attention.] . . .

Japan is poor in natural resources and has moreover lost international confidence in attempting a useless war. It is as though a poor man provoked a quarrel with his neighbors. Being poor he has no money to draw from savings account, nor property to sell; having provoked a quarrel he cannot easily borrow money from neighbors. The Japanese people fully appreciate that none of these measures is of much help to present-day Japan. In particular, the stock upon which we can draw and property which we can draw have been well-nigh exhausted in two years after the termination of the war.¹⁹

Price movements and available supplies also received much attention in the Japanese report, which distinguished official, black-market, and effective prices. In March 1947, approximately one-quarter of staple foods was purchased on black markets at prices eight times the official prices. In allowing for black-market prices, the government found that prices of consumer goods were 60-70 times higher than ten years before. Wages were up much less—37 times for the favored underground coal miners, and 23 times for the manufacturing workers (male). In view of the reduced real wages and the unavailability of supplies, it is not surprising to find that in the six largest cities rations were 1,100 calories and 30 grams of protein, as compared with standard rations of 1,500 calories and 40 grams of protein, and of 2,105 calories and 65 grams of protein in 1941. In the pre-war years, Japanese used 11.2 pounds of textiles; in 1941, 6.2 pounds; in 1945, 1.2 pounds; and in 1947, less than 2 pounds.

In short, Japan has had a large inflation brought on by its scarcity of goods and inflationary finance. Because of reduced productivity and deficiency of supplies, real wages had to fall. This might have been accomplished, despite a rise in wages equal to that in official prices, by the sterilizing of a large part of available purchasing power or by using it to bid up prices on black markets. The scarcity of goods was reflected in a failure of wages to rise as much as the effective price, i.e.,

¹⁹ *Ibid.*

official and black-market prices weighted by purchases at black-market and official prices.

Inflation in Two Controlled Economies

In Czechoslovakia and Poland, monetary and fiscal measures received much attention. In general, there was agreement that inflation should be excluded, that financial resources should be mobilized to the advantage of the productive industry, and that budgetary improvements should be achieved. On the last point, Poland was orthodox in seeking a balanced budget; Czechoslovakia, ever mindful of the need of keeping incomes up, would merely aim to reduce deficits. Tax reform was also common to both plans. In Czechoslovakia, a confiscatory levy on capital increments in wartime, and a capital levy, the latter part of a program to sterilize excess money, would contribute towards the removal of excess currency. Blocked currency would be freed or consolidated after a census of wealth was taken, the objectives being to free currency as determined by the financial status of the holder, and to exclude inflation.

In Czechoslovakia, the banks were no longer to compete; each bank was to be tied to an industry, with general supervisory powers; the rate of interest was to be reduced; and resources were to be mobilized for productive purposes. Government, industry, and banking credit were to provide industry with funds for planned investment. Like the Russian model, the Czech plan would balance supply and demand by proper use of tax and price policies.

Although they promised a financial plan, the Polish planners were not explicit on some of the issues raised by the Czechoslovakian plan. On two problems the Polish plan was more articulate than the Czechoslovakian. Wages should be increased with rises in productivity, with the increased flow of consumers' goods, and with reduction of costs; and workers with similar qualifications and doing similar work should receive equal real wages. The Polish plan also envisaged an end to the two-price system, which was to be achieved largely by a reduction in "free" prices. Where, for example, special aid was required for low-income groups, or where goods served different categories of consumers, a two-price system might be appropriate. It was also proposed that industrial prices rise to costs of production, and that prices should approach world levels.²⁰

Hyper-Inflation in Greece

Heroic measures were necessary to deal with advanced inflation in Greece. Among the recommendations were the following: extended use

²⁰ *Statement of Policy of Mr. Gottwald's Government*, pp. 35-40; *Polish National Economic Plan*, pp. 24-7.

of rationing and price control; expansion of output to be achieved through improved training, multiple shifts, increased availability of repair parts and machinery, and measures to penalize hoarding of supplies; a rise of foreign trade, to be furthered by bilateral trade agreements; an expansion of exports through a reduction in export prices by the use of anti-inflationary measures and particularly, the reduction of prices of commodities purchased by farmers. Co-operatives, which might reduce purchase prices abroad and eliminate high-cost middlemen, might well make an important contribution to the fight against inflation. If they were to thrive, however, they required help from government. Finally, tax reform, supported on grounds of equity, would also help. Approximately four-fifths of Greek taxation was on goods used by producers and consumers, and was an important factor contributing to price-spiralling and the loss of export markets, which, because of the adverse effects on imports, contributed to higher prices.²¹

General Comments on Inflation

(A) *Orthodox and Unorthodox Measures.* During the war inflation was world-wide. In countries relatively unharmed by actual warfare, the temptation to use unorthodox measures was not great. Even the United Kingdom under a Labor Government was content to rely upon price control and limited controls over supplies—e.g., import controls, rationing, licensing of new factories, and in 1947-48, some control over man-power. Taxation was not to play a decisive part, although it was held important to balance the budget. Official reports had little to say on the treatment of inflation through fiscal policy. The White Paper on *Employment Policy* made small concessions to the principles of compensatory finance, that is, a rise of receipts in periods of prosperity and a contraction (through reduction of pay-roll taxes) plus some additional expenditures in depression.²² It is striking, indeed, that the important *Economic Survey for 1947* had virtually nothing to say about fiscal policy, or anti-inflationary policy. Nor did the Australian, Canadian, or American official reports suggest drastic measures to deal with inflationary pressures. In the United States, the relation of wage and price inflation received some attention; the Government was aware that tax reduction in periods of excess demand would be a mistaken policy: it would be preferable to pay off debt.²³ In 1948-49 both the British and American governments were more disposed to rely on fiscal policy.

²¹ *Report of the FAO Mission for Greece*, pp. 11-13, 57-8, 151-3.

²² Pp. 24-6.

²³ *Midyear Economic Report of the President* (July 21, 1947), pp. 24-6. In the January 1948 *Economic Report of the President* (pp. 41-52), the government finally proposed an anti-inflation program with teeth in it.

(B) *Blocked Currencies.* Countries which had been occupied or (and) had experienced actual warfare, were disposed to take radical steps; and the more extreme the inflation, the greater was the incentive to have recourse to extreme measures. The reader will recall, for example, the discussion of inflation in Greece, Czechoslovakia, Japan, Belgium, and Hungary. In these and other instances, the approach was to withdraw and block at least part of the currency and deposits outstanding, or (and) to exchange new currency for old at a multiple of old for new currency.

A concise view of countries resorting to blocking of currencies is given in the following table:

CIRCULATION, 1938 AND LATER YEARS, FOR COUNTRIES RESORTING TO EXTRAORDINARY CURRENCY MEASURES ²⁴

	<i>Circulation, 1938</i>	<i>Maximum * circulation prior to blocking</i>	<i>Minimum * circulation after currency is blocked</i>	<i>Circulation, end of 1946</i>
Belgium (billion francs)	22.0	83.2	44.3	72.2
Czechoslovakia (billion korunas)	7.0	42.8	20.7	44.5
Denmark (million kroner)	441	1,700	868	1,633
France ** (billion francs)	111	581	444	722
Greece *** (billion drachmas)	7	3,114	26	468 (Nov.)
Hungary (billion pengos)	0.9	47,349,492,000,000,- 000,000,000,000 (or 47.3×10^{24}) ****	356 (million forints)	968
Japan (billion yen)	2.8	58.6	23.3	91.3
Netherlands (million gulden)	993	5,517	748	2,744
Norway (million kroner)	477	3,021	1,018	1,933

* Minimum and maximum as revealed by the *United Nations Monthly Bulletin of Statistics*.

** Bank of France notes withdrawn and exchanged.

*** November 1944, old drachmas were exchanged for new at the rate of 50 thousand million for one new drachma.

**** July 1946, hence substantially higher than June figures given earlier in chapter. (Not in billions).

In general, occupied countries resorted to blocking of currencies or partial demonetization. Italy with a large rise in circulation does not as yet seem to have adopted unorthodox measures, nor did the authorities in Bizonia put through a monetary purge until 1948. Once a demonetization has been effected, the reduction of money is generally by one-half or more. It will be noted, however, that as a result of gradual unblocking of blocked currencies and other factors, the circula-

²⁴ Adapted from *Monthly Bulletin of Statistics of the United Nations*, March 1947, pp. 65-8.

tion began to rise once more, and in some instances it had exceeded the pre-blocking maximum circulation by the end of 1946.

(c) *Wages and the Cost of living.* In many countries, wages did not rise so much as the cost of living. This lag of wages behind the rise in the cost of living is an obvious way of forcing workers to accept a reduction in their standard of living adjusted to the supply of consumption goods. Failure of wages to rise as much as the cost of living may result from conscious official policy or weak organization of workers. The most notable instances of large lags in wages are to be found in France and Japan; also in the Netherlands wages did not rise so much as prices. In other countries (e.g., the United States, United Kingdom, and Chile) wages rose much more than the cost of living. (Obviously, the rise was greater in manufacturing than in non-manufacturing; and it is important to distinguish the increase in basic wage rates, straight-time hourly wages, hourly earnings, and weekly earnings—the increase grows in that order).²⁵ In war times, the rise in wages at a rate *substantially* greater than the cost of living is only possible insofar as labor can exploit other groups, and more important insofar as labor takes an increasing part of wages in monetary hoards. (The United States, with its large rise of employment and output in 1941-45 could raise its living standard substantially). In Canada, Australia, and Czechoslovakia the net increase in prices and wages was roughly equal.²⁶

(d) *Exchange Rates.* Exchange policies of countries suffering from inflation, unlike policies after 1918, were directed towards making the currency expensive, or overvalued. Fearing excessive exports in a world of scarcities, desiring more imports, and determined to reduce inflationary pressures, the countries embarrassed by inflation and also short of dollars and goods—inflation itself is a reflection of shortages—preferred to keep their currency at a high rather than a low value. Should their currencies depreciate beyond the point set by relative price movements at home and abroad, their exports would be a bargain and their imports expensive. They would lose goods—both because they exported more and imported less—and, in addition, with low-valued currencies, exports would yield more domestic currency units and imports cost more in domestic currencies—all contributing towards inflation. It is no wonder that most currencies are overvalued in relation to the dollar. The degree of overvaluation is marked when wholesale prices are taken as the guide and not so large when the guide is the cost

²⁵ Cf. my *Inflation and the American Economy*, chs. 19-22, and symposium on "Wage Policy," *Review of Economic Statistics*, Aug. 1947, by Professors Slichter, Harris, and Dunlop, especially, pp. 137-8.

²⁶ Cf. *Monthly Bulletin of Statistics of the United Nations*, March 1947, pp. 89-97.

of living, subsidized and controlled abroad, or wages, in many instances, vigorously kept down by many countries. First Italy and then France in 1947-48 seem to have abandoned the policy of over-valued currencies.

Conclusion

War and early post-war inflation varied from 25 per cent in Australia to 4.70 times 10^{25} in Hungary; and anti-inflation policies were in no small part determined by its extent. Countries with large doses of inflation were inclined to take strong measures; but their attitudes towards state controls and private enterprise colored their policies to some extent. In Greece, for example, where inflation had attained an advanced stage, controls had not been pushed so far as they had in the United Kingdom, with its relatively small dose of inflation.

No planner could afford to make his blueprint without considering the effects of monetary expansion. Inflation brought shortages of goods and also reflected the prevailing scarcities to which it had contributed. It intensified the pressures for controls, because under inflationary conditions, not only were supplies inadequate, but they were badly distributed. Further, it suggested to monetary reformers vigorous measures to reduce the monetary circulation, and to socialists a road (e.g., confiscation of excess money) to more equitable distribution.

The contrast in anti-inflationary policies was striking. Persuasion and a modest use of fiscal policy (e.g., repayment of public debt) were to be the main weapons in the American anti-inflationary arsenal. In the United Kingdom, rationing, Control of demand through savings programs, licensing of imports and new factories, other allocation measures—these measures, and a mild use of fiscal policy sufficed. In Japan, the main reliance was on rationing and allocations, and on acquiescence to large diversions of money to black markets, and attempts to balance the budget. Occupied countries in Europe took the drastic measures of blocking currency, and even permanently demonetizing large parts of their monetary circulation.

In general, it might be said that countries favoring planning on a large scale were inclined to depend more on the allocation of resources and control of demand than they were on purely monetary and fiscal measures. In the transition to socialism, they were, however, prepared to confiscate part of existing monetary supplies and to reform the tax system.

International Economic Relations

Varying Attitudes

AT ONE extreme is the USSR, harboring the most extreme form of economic isolationism. Rather than become dependent on the outside world, the Russian government prefers to incur the large costs of a self-sufficient economy which largely excludes foreign goods, irrespective of how much more expensive it may be for them to produce all goods rather than concentrate on certain commodities which might be exchanged in foreign markets for products from abroad. Again, fearing the nexus of external economic relations, the USSR is prepared to relinquish sorely needed foreign capital which might be had by joining the international economic organizations. The 30,000-word *Law on the Five-Year Plan for 1946-50* does not devote a single paragraph to international economic relations. That a régime which leans heavily on materialistic concepts of life and which has been referred to by one critic as the "beefsteak" economy, should sacrifice large material resources by its almost complete severance of international economic relations, is worthy of comment.

At the other extreme is the United States, which, at least in its official pronouncements and in the position taken by its negotiators in various international conferences, supports liberal trade policies. It remains to be seen, however, whether the Congress in depression as well as prosperity will back up the pronouncements of the Democratic Administration with liberal trade practices and a generous and sustained foreign lending policy. An even more uncertain aspect of United States policy relates to the wisdom and courage with which American authorities

will pursue an anti-depression policy; for unless the country is prepared to have recourse to unorthodox measures, with their de-emphasis of financial considerations, the United States could not remain prosperous, and an American depression will tend to pull her foreign suppliers and debtors down into the quagmire of deflation and depression.

Other countries hold intermediate positions. Disturbed by the repercussions of worldwide changes, and particularly of industrialization upon her economy, Belgium would seek the widest possible extension of trade; but realizing the difficulties of multilateral trade, she is prepared also to support economic blocs. A small country, heavily dependent upon international trade, is indeed seriously affected by every international development. Yet Belgians would not accept the fatalistic philosophy which might spring from an awareness of the pervasive influence of events abroad; much will depend upon Belgian policies and activities.¹

Unlike the USSR, Czechoslovakia recognizes the need of substantial amounts of foreign trade, even though her economy is to be controlled. She must obtain sufficient quantities of iron ore, phosphates, pyrites, soda, industrial salt, wool, cotton, hides, oilseeds and other essential products; payment is to be made by the exportation of finished products of her engineering and chemical industries, footwear and leather goods, and certain agricultural products. As might be expected from a country in the Russian orbit, Czechoslovakian planning reflects new influences at work:

The orientation of our foreign trade must guarantee us as far as possible permanent markets for our products and permanent buying sources for our import needs, in order to gain independence of economic fluctuations and crises. A substantial all-around extension and deepening of trade relations with the Soviet Union and the other Slav States, as well as the rest of the countries of Central and South-Eastern Europe is needed above all for this purpose. . . .

The organization of our foreign trade must be adapted to the new structure of our economy. Developments aiming at the concentration of the organization of foreign trade will be supported so that imports and exports may be uniformly directed, according to the needs of the State. . . . In the sphere of export unsound mutual competition in foreign markets between Czechoslovak firms must be eliminated and provision made lest exchange gained by export be misused, but on the contrary, that it should benefit the whole national economy.²

Poland, also unlike the USSR, cannot thrive without large imports; at first food, raw materials, and equipment, and later, especially raw

¹ *Rapports de la Commission pour l'Etude des Problèmes d'Après-Guerre* (1941-44), pp. 123-39.

² *Statement of Policy of Mr. Gottwald's Government*, pp. 41-2.

materials. As in the Czechoslovak plan, the government is to control foreign trade; and in addition it is to obtain foreign credits, to allocate resources for export markets, and to determine what is to be imported.³

In the post-war period, the struggle lies between those who seek state control of trade (e.g., USSR and Czechoslovakia) and those who would depend on economic blocs (e.g., numerous European countries) on the one hand, and the countries which would return to multilateralism and private control of trade. In the middle, and perhaps decisive in the ultimate choice, is the United Kingdom.

In 1944, the British government proclaimed their adherence to a program of trade expansion, and based on world prosperity: Bretton Woods was to be the keystone of the program. The British government would seek international co-operation, try to reduce fluctuations in world prices and incomes, help set up organizations with resources to help those who, in distress, might otherwise take measures to arrest trade, and rely on the resilience and flexibility of their export trade to retrieve their international position.⁴ Even at that time, however, strong interests in Britain expressed antagonism to the program of multilateralism, which the United States demanded as the price to be paid for its financial aid.

Three years following the publication by the Coalition government of the White Paper on *Employment Policy*, which enunciated these principles, the British Socialist government issued a report which made clear the need of a rigid control of imports. Despite large foreign loans and a substantial revival of export trade, a serious dollar shortage plagued the government.⁵ With the rapid deterioration of the British balance of payments, the Socialist government was prepared in 1947 to take even more stringent measures: to economize on imports through direct restriction and development of domestic industries; to expand exports through increased controls; to divert import trade to countries not requiring payment in dollars; to steer exports to customers which would pay in dollars and currencies freely convertible into dollars; and to ask and obtain relief from obligations to convert sterling into dollars and to trade on a non-discriminatory basis undertaken under the Anglo-American Financial Agreements. In short, Great Britain had taken a long step away from multilateralism and private control of trade.

Bilateralism is the only way out for years to come for many European countries, as is evident in the spate of bilateral trade agreements since 1944. In this manner, they seek maximum amounts of trade, for they cannot afford to sell unless they are sure of receiving wanted goods in return, rather than currencies that are blocked or that are likely to be

³ *Polish National Economic Plan*, p. 22.

⁴ White Paper on *Employment Policy* (1944), pp. 4-5.

⁵ *Economic Survey for 1947*, pp. 11-12, 17-20.

blocked. Once a country like the United Kingdom abandons convertibility of sterling received by foreigners on current transactions into dollars, as it did in 1947, the pressure towards bilateralism and inconvertibility increases. The few countries that continue to allow convertibility into dollars will be inundated with goods and will have to take measures to protect themselves against losses of gold and foreign exchange.⁶

Foreign Borrowing

Recourse to foreign loans is on the agenda of most countries planning for the future. In the plans presented here, only the USSR and the Argentine seem somewhat allergic to foreign aid.⁷ Whether the occasion is temporary aid to tide the country over during reconstruction, or to help modernize or industrialize the economy, most countries seek the largess of foreign loans.

Greece, Poland, Czechoslovakia, India, Norway, and France all seek foreign credits. We shall not comment here on the place of the foreign loans in their economy, since their borrowing policies have received attention elsewhere in this volume. It remains to say a word about a few other countries.

The Netherlands, for example, presented a global plan for 1946, in which foreign credits (including liquidation of foreign assets) would account for 1.8 billion guildens out of a total requirement for the country's capital market of 2.9 billion guildens, and would provide 1.8 billion out of the 2.8 billion guildens required to balance the international accounts. Importation of capital was, thus, to be the major item of capital formation and the major source of foreign exchange. Obviously, the large dependence on foreign credits to equilibrate the balance of payments can be explained by the increase of imports (a rise from 1.7 billions in 1938 to 2.8 billion in 1946), and the reduction of exports (from 1.8 to 1.0 billion guildens). This worsening of the balance of trade reflects the reduction of output with an accompanying loss of export potential, and increased need for imports occasioned by war and occupation.⁸

⁶ The reader will find a good popular statement concerning the need of bilateralism in Europe as well as its disadvantages and the means of ridding the world of it in Dept. of State: *Problems of United States Foreign Economic Policy* (Sept. 1947), pp. 17-25 (by Assistant Secretary W. Thorp). For the system of multilateral clearings actually worked out in Europe in 1948, see *Agreement for Intra-European Payments and Compensations* (Paris, October 16, 1948), Cmd 7541.

⁷ The White Papers of Australia and Canada also show little interest in foreign borrowing.

⁸ *First Memorandum on the Central Economic Plan 1946 and National Budget 1947*, p. 41.

Yet their Planning Bureau is anything but enthusiastic about borrowing, as is evident when it considers the possibility of greater reliance on foreign borrowing or liquidation of foreign assets:

The contracting of larger credits or the liquidation of large amounts of foreign assets. Apart from the question whether this would be possible, it would soon meet the objection that thereby either the burden on the Dutch economy of interest and repayment due to foreign creditors would be still further increased, or our income of interests and dividends reduced. In view of our limited transfer capacity, such measures, which could only mean a delay of the necessary clean-up of our economic life, would lead us into a blind alley. The forcing of our exports to cover our increased foreign obligations would necessitate a price reduction of our export products that would surely prove unacceptable, both economically and socially.⁹

Problems Peculiar to Conquered Countries

Japan and Germany are in a peculiarly difficult position. Elsewhere we comment on shortages in Japan, and the difficulties of obtaining foreign credits. Following the war, Japan's imports had to be primarily foodstuffs; by 1947, raw materials required for reconstruction had become more important. In 1946, her imports were but 6 per cent, and her exports 17 per cent, respectively, of the 1936 level, and the excess of imports by the end of 1946 was substantial.¹⁰ It is obvious that Japan's economic recovery awaits large reconstruction loans.

In Germany, the adverse balance of payments is one of the most serious problems confronting the country and the occupation authorities. Loss of plant as a result of war and reparation payments reduced the export potential; but even more important, the level of industry plan would *ultimately* have greatly curtailed exports. By 1949, her output of machine tools, according to the Allied Control Council decision of March 28, 1946, was to be 11 per cent of pre-war production; of steel, 30 per cent; of basic chemicals, 40 per cent; of non-ferrous metals, less than 50 per cent; of electric power, 60 per cent; of boots, shoes, farm machinery, tractors, and textiles, each from 70 to 80 per cent. Failure to join the four zones into one economic unit, as was provided under the Potsdam Agreement, and the decision to help the liberated nations first, further impaired the international position of Germany. The Russian zone lacked iron and steel; the American, coal; the British and French, food. Export capacity in one zone could not be used for the benefit of all of Germany. As the German economy failed to recover, occupying countries—the United States and the United Kingdom in particular—

⁹ *Ibid.*, p. 45.

¹⁰ *Economic Condition of Japan, Official White Paper* (July 4, 1947).

had to finance imports of essentials to Germany, and thus provide her with credits, or rather, gifts.¹¹

Dissatisfied with the progress made in Germany, the United States Government in July 1947 issued a new directive to General Clay on *Military Government Policies in Germany*. The directive underlined the following: reparations should not exceed the amount determined at Potsdam; removal of excess capacity to assure Germany's peaceful intentions should not permanently limit her industrial capacity; the Germans, after the payment of reparations and consistent with disarmament, should not be denied the right to use their resources to raise their standard of living; the United States should not pay indirectly for reparations to others; exports should be used in the first instance to pay for authorized imports.¹² Finally, as is noted in Chapter XII, the level of industry for the British-American zone was raised substantially in the summer of 1947, in large part in order to expand the German export potential.

The Shortage of Dollars

An almost universal shortage of dollars, which has troubled many countries for more than a generation, ripened into a major crisis in 1947. That the problem is one of long standing is evidenced by the excess of exports from the United States of \$19 billion and by an inflow of gold of \$11 billion over a period of 21 years before World War II.¹³ This persistent inflow of gold into the United States, which reflects the unusual demand for dollars, may be explained by the relative plenitude of goods here and the scarcity in Europe and elsewhere—in turn, explained by two costly wars, the failure of foreign countries to keep pace with economic and technological advances in the United States, and the slowness with which costs and prices declined in response to the loss of gold by foreign countries, and rose in response to imports into the United States.

World War II quickened the demand for United States goods. In 1947, Europe's food imports from the United States and Argentina cost \$1,200 million, or approximately six times the cost in the pre-war period, and although European coal imports were reduced in relation to pre-war times by one-half in 1946, the contribution of Germany and

¹¹ State Dept.: *United States Economic Policy Toward Germany*, pp. 4-13, 18-25, 27-39, 47-8; and Office of Military Government for Germany (U. S.): *A Year of Potsdam*, sections II, IV.

¹² "Text of U. S. Instructions to General Clay on Military Government Policies in Germany," *The New York Times*, July 16, 1947, p. 8. An examination of the *Report to the E.C.A. on the First Annual Program* by the OEEC (pp. 62-5) will suggest the large gains made in 1947-8 and expected in 1948-9.

¹³ The details, as well as the issues, are presented in my article on "Dollar Scarcity" in the *Economic Journal*, June 1947, pp. 165-78.

the United Kingdom had been reduced from three-quarters to little more than one-third.¹⁴ Unable to pay for the vast supplies needed, foreign countries had to cover their deficits primarily by loans and gifts, for the most part from the United States, and secondarily by the sale of gold and other foreign assets. From June 30, 1945, to March 31, 1947, for example, the United States provided \$14.8 billion of foreign financial assistance: \$6.3 billion in loans (\$3.75 billion to the United Kingdom, and \$2.55 billion through the Export-Import Bank to numerous countries); \$2.87 billion of property credits (e.g., Lend-Lease pipeline and inventory credits, and surplus stocks); \$2.22 billion of other aid (notably \$1.2 billion for civilian supplies to occupied areas); \$3.35 billion in grants: \$2.7 billion to UNRRA and \$620 million to the Philippine Republic). As of December 31, 1946, \$7.8 billion of \$14.3 billion of assistance granted had been utilized.¹⁵ By the end of June, however, there remained but \$4 billion.

For 1947, Under-Secretary Acheson had estimated United States exports at \$16 billion, imports at \$8 billion, the difference being accounted for by \$5 billion of loans and gifts and \$3 billion by sales of gold and other assets by foreigners and private remittances and investments.¹⁶ In response to the large loans and credits, United States exports early in 1947 attained an annual rate of \$20 billion, or \$13 billion in excess of imports; but over a two-year post-war period the annual excess was but \$7 billion. Exports of United States goods and services amounted to \$20.2 billion in the five quarters ending March 31, 1947. Foreigners paid for these exports in the following manner: 45 per cent through goods and services sold to this country; 16 per cent through the liquidation of long- and short-term foreign assets, including gold; 21 per cent through long- and short-term credit; 19 per cent through unilateral transfers (gifts);¹⁷ in short, three-fifths through the use of their own resources, and two-fifths through loans and foreign aid.

It is obvious that most of the countries under consideration in this volume and most other countries are short of dollars. According to the League of Nations report of early 1947, for example, ten selected countries in Europe faced a net excess of imports of \$4.4 billion in 1947 and a net deficit in their balance of payments of \$4.5 billion. (France, \$1,578 million; Italy, \$806 million; Belgium, \$465 million; Czechoslovakia, \$148 million; Hungary, \$83 million; Netherlands, \$514 million;

¹⁴ International Bank for Reconstruction and Development: *Second Annual Report* (1946-47), p. 10.

¹⁵ Report of U. S. National Advisory Council (republished in *Federal Reserve Bulletin*, July 1947, pp. 836-50).

¹⁶ U. S. Dept. of State: *The Development of the Foreign Reconstruction Policy of the United States* (1947), p. 2.

¹⁷ Calculated from *Survey of Current Business*, June 1947, pp. 6-7.

Poland, \$369 million; Yugoslavia, \$335 million; Austria, \$222 million; and Finland, \$55 million.)¹⁸ From July 1, 1945, to March 31, 1947, the Export-Import Bank had granted credits of \$1,866 million to twelve countries (plus unallotted cotton credits). These include the European countries tabulated above in the last paragraph, excluding Yugoslavia, and, in addition, Denmark, Greece, and Norway. Further, nine Latin American countries had received credits of \$117 million and Asia and Africa, \$223 million. By March 31, 1947, moreover, the International Bank had loan applications of \$2,345 million (Chile, \$40 million; Czechoslovakia, \$350 million; Denmark, \$50 million; France, \$500 million; Iran, \$250 million; Luxembourg, \$20 million; Netherlands, \$535 million; and Poland, \$600 million). In the middle of 1947, however, the dollar resources available were but \$725 million, of which the United States had provided \$635 million.¹⁹

The 16-Nation Report of the Paris Conference put the dollar deficit at \$22 billion for the years 1948-51, the deficit for 1948, \$8 billion, and for 1951, \$3 billion; and of the total, \$16 billion with the United States, and \$6 billion with other countries. Total imports from the American continent for the four years were to be \$35 billion, of which \$20.4 billion were to be from this country and \$14.8 billion from the rest of the Americas. Total imports were to be no less than \$57.3 billion.²⁰

In its General Report, the Committee of European Economic Co-operation presents an excellent analysis of the dollar problem. A breakdown of production and of trading accounts for the European dollar dilemma. Unavailability of supplies from Germany, Russia, and the eastern part of Europe generally, and from southeast Asia forces Europe to depend on the United States and the Americas much more than in the pre-war years. With production of bread grains in 1946-47 but 80 per cent of the pre-war figure for the participating nations, of coal and lignite 80 per cent, and of crude steel 67 per cent, the production crisis is easily explained. Without adequate food and other consumers' goods, the interest in work lags and farmers refuse to trade. It can readily be understood why import requirements of bread grains are 23.7 million tons for 1947-48, or 80 per cent in excess of the 1934-38 average, and

¹⁸ Preliminary Report of Subcommittee No. 2—Foreign Economic Policy of the Committee on Foreign Affairs: *Needs, Limits, and Sources of American Aid to Foreign Countries*, . . . (1947), p. 4.

¹⁹ *Federal Reserve Bulletin*, July 1947, pp. 839, 849-50.

²⁰ Committee of European Economic Co-operation: *General Report*, Vol. I (1947), pp. 41-57; cf. Vol. II, *Technical Reports*, p. 12. According to the latter, post-war loans and credits granted to the participating countries until August 15, 1947, were \$7,776 million, excluding \$513 million granted by the International Fund and Bank.

yet why the per-capita consumption of bread grains in 1947-48 is to be but 85-90 per cent of that in 1934-38.²¹

Obviously, the large loans and gifts drain the United States of supplies in a period of over-employment and thus contribute towards inflation, and they also accelerate the depletion of scarce economic resources. Fearing that the limits of our capacity to export might be reached, ex-President Hoover in a letter to Senator Bridges on June 15, 1947, suggested that after an examination of United States resources, limits should be put upon United States exports through controls of loans and gifts. The effect of this proposal, in the absence of export controls, would be to favor countries with plenty of gold and other assets convertible into dollars. Limitation of loans is not, moreover, the appropriate manner of dealing with inflation in the United States, as Mr. Hoover seems to indicate. To treat inflation thus would be like burning down the house to roast the pig. Controls and proper wage, monetary, and fiscal policies are the potent weapons in the anti-inflation arsenal. President Hoover's analysis of the problem does suggest, however, the doubts held by many concerning the wisdom of a courageous lending policy for the United States, and raises the question as to whether or not the planned economies will receive the foreign aid envisaged in their plans for reconstruction and industrialization. It is significant, also, that in implementing the Marshall Plan, the President called for a census of United States resources.²²

Exchange Rates and the Balance of Payments

In setting up the International Monetary Fund and the International Bank, most countries had agreed, with some exceptions, to eschew ex-

²¹ *Ibid.*, especially Vol. I, Chapters III, VI, VII.

²² The reader who might wish to pursue the problem of the European Recovery Program should consult especially the following: *Committee of European Economic Co-operation: General Report* (Vol. I, Sept. 1947), *Technical Reports* (Vol. II, July-Sept. 1947); *National Resources and Foreign Aid* (Report of J. A. Krug, Secretary of the Interior, Oct. 9, 1947); *The Impact of Foreign Aid upon the Domestic Economy: A Report to the President by the Council of Economic Advisors* (Oct. 1947); *European Recovery and American Aid: A Report by the President's Committee on Foreign Aid* (Three parts, Nov. 1947); *The European Recovery Program: Basic Documents and Background Information* (Staffs of Senate Foreign Relations and House Relations Committee, Nov. 19, 1947); *Foreign Assets and Liabilities of the United States and Its Balance of International Transactions* (A Report to the Senate Committee on Finance by the National Advisory Council on International Monetary and Financial Problems, Dec. 18, 1947); *Outline of European Recovery Program: Draft Legislation and Background Information* (Statement by the Department of State for the use of the Senate Foreign Relations Committee, Dec. 19, 1947); *A Foreign Economic Policy for the United States* (Edited by Seymour E. Harris, Harvard University Press, 1948); also see Organisation for European Economic Cooperation: Report to E.C.A. on First Annual Report, 1st July, 1948-June 30, 1949 (1948), and Seymour E. Harris: *The European Recovery Program* (1948).

change controls, quantitative restrictions on imports, and competitive exchange depreciation. The Anglo-American Financial Agreement and the ITO Charter support the principles of Bretton Woods, although many compromises have had to be made.

It was assumed that variations in exchange rates would be used to help equilibrate the balance of payments. Yet though most currencies were overvalued in relation to the dollar when the initial rates were fixed under the Monetary Fund—clearly if the guide was movements in prices—the participating countries insisted upon going rates. In other words, countries suffering from high prices at current exchange rates refused to accept the hypodermic of exchange depreciation. The explanation of this reluctance to depress exchanges was that the relevant countries feared the inflationary effects of a reduction in exchange rates; and rather than expand exports, they were much more interested in raising imports—an objective more easily achieved with high than with low exchange rates. In January 1948, however, France flouted the Monetary Fund—not by devaluing, but by providing for multiple currency rates which stimulated purchases in countries with soft currencies and sales for hard (e.g., dollar) currencies.

Our various plans say relatively little about exchange rates. In supporting international organizations, the British, obviously, were prepared to have recourse to changes in exchange rates. Yet despite the crisis of 1947, they shunned this easy way out. Indeed, they favored exports to countries with hard (i.e., high-valued) currencies, sought imports from countries with weak currencies, and restricted convertibility of sterling into dollars. In diverting trade to countries with hard currencies, the British were obtaining higher prices: currencies that might be used are more valuable than those that cannot. British reluctance to depress sterling might be explained also by its then undervaluation.

. . . . We are now drawing some 42 per cent of our imports from the Western Hemisphere, which is now the main source of the food and raw materials that we must have. But we are selling them only 14 per cent of our exports. We are thus running large deficits with these countries. These must be settled in dollars or their equivalent. To much of the Eastern Hemisphere on the other hand, we tend to sell more than we buy. In a world fully recovered from war, this would provide us with the means to settle our deficits with the West. But now many of the Eastern Hemisphere countries have no gold or dollars or essential goods with which to pay; to others we owe large debts which we shall have to repay gradually, and the surplus in our trade with such countries is used up in this way. We therefore, shall not be able wholly to use our surpluses with Eastern Hemisphere countries against our deficits with Western Hemisphere countries.²³

²³ *Economic Survey for 1947*, p. 19.

This quotation suggests the reason why variations in exchange rates do not retain their pre-war popularity. Recourse to a revision of rates as compared with manipulation of the direction of trade through exchange control or quantitative limitations is using the axe rather than the scalpel. A reduction in exchange rates will move the terms of trade against a country without necessarily substantially raising the supply of foreign currencies made available. It is much more effective to raise prices through monopolistic control of trade;²⁴ to sell to customers who pay in hard currency; to restrict imports, and direct purchases to countries which will not require hard currencies in payment. What determines the yield of foreign sales is the price of sale and the kind of currency in which payment is made—this is much more important than practical changes in nominal rates. Should the British depress the price of sterling by 20 per cent, they might obtain somewhat more dollars; but they would give more of their scarce exports for imports. They would achieve much more by raising prices in dollars; and by selling more goods in the United States (say) and receiving payment in dollars, and cutting sales in Greece, payment for which is made in drachmas, not convertible into dollars or essential goods.

Other points can also be adduced against recourse to exchange depreciation. In the current situation, many countries find quantitative restrictions and fragmentation of markets through exchange control more effective in conserving foreign exchange. A country may exploit its monopoly position by offering foreign exchange at varying prices according to the essentiality of imports, and offering domestic currency for foreign exchange at varying prices—e.g., the highest price in domestic currencies might be offered for exports for which domestic supply and foreign demand are highly elastic. In that case, the special incentive of many pesos (say) for each dollar will yield the maximum in foreign exchange, and yet will not cheapen the currency on all markets. A system of sectional rates combined with control, if adequately supervised by an international agency, would allow countries with weak positions to exploit monopoly elements at the expense of countries in strong positions. (France to some extent applied the technique of exchange discrimination early in 1948).

On the Continent, the pressure from the United States forces countries that seek aid to bring their exchanges down to an equilibrium level. In this manner, it is hoped exports and net receipts of foreign currencies will increase in 1948 and later years, and the burden on the United States be correspondingly reduced. Should devaluation be accompanied by increases of taxes, reduction of public expenditures, and control of wages, the effects on exports might be favorable. It is not, however, clear that the net results would be salutary.

²⁴ Gains are frittered away insofar as similar policies are pursued elsewhere.

On the assumption that 1937 exchange rates, based on relative *wholesale prices*, were equilibrium rates, foreign currencies were generally overvalued in relation to the dollar in 1945, 1946, and the first half of 1947. The five British currencies were, however, undervalued by 1946; and in the first half of 1947, the average undervaluation was 21 per cent. It is interesting that despite this undervaluation (cheapness of sterling and British goods) and quantitative restriction, the British were still far from an equilibrium position. Nineteen other countries for which figures are available had overvalued currencies in 1945, 1946, and 1947. The Norwegian krone alone of the non-British currencies was substantially undervalued in the years 1946-47. The Peruvian sol was slightly undervalued in 1946 and the Venezuelan bolivar in 1946 and 1947. In general, the degree of undervaluation tended to rise and overvaluation to fall after 1945; the explanation undoubtedly was largely the inflation in the United States.

Undervaluation was also the rule for British countries, and overvaluation for others when the basis of comparison is *consumer prices*. The average undervaluation of sterling on this basis in 1946 was 12 per cent and in the second quarter of 1947, 17 per cent. For 25 non-British countries, this average overvaluation in the second quarter of 1947 was 45 per cent. (The corresponding average for 20 non-British countries based on wholesale prices was 20 per cent.)²⁵

Australia and Canada are two of the countries which subscribe to the principles of free trade, appropriate variations in exchange rates, employment policies, and free capital movements as prerequisites to trade. Australia would use foreign assets to meet a minor fluctuation in exports, quantitative restrictions on imports, and variations in exchange rates and transfer of resources to deal with more permanent changes.²⁶

Other plans in this volume have little to say about exchange rates. The Argentine, it will be recalled, would segmentate the exchange markets with variations in rates as a means of stimulating essential imports and exports of fabricated products. Greece, confronted with high export prices, considered recourse to subsidies, exchange depreciation, or monopoly selling, with high prices at home and reduced prices abroad. Her FAO advisors, however, opposed these measures, which would have further raised domestic costs and prices.²⁷ Sweden was another country which went on record as favoring multilateralism. Yet she feared the

²⁵ The rates are for the second quarter or for a month in the second quarter, and in one case for January 1947. By early 1948, overvaluation of the French franc had attained the proportions of 100 per cent.

²⁶ Parliament of the Commonwealth of Australia: *Full Employment in Australia* (1945), pp. 13-14; *Hearings before Subcommittee on Banking and Currency U.S. Senate on Full Employment Act of 1945*, p. 92; Canada, *ibid.*, pp. 108-9.

²⁷ *Report of the FAO Mission for Greece*, pp. 152-3.

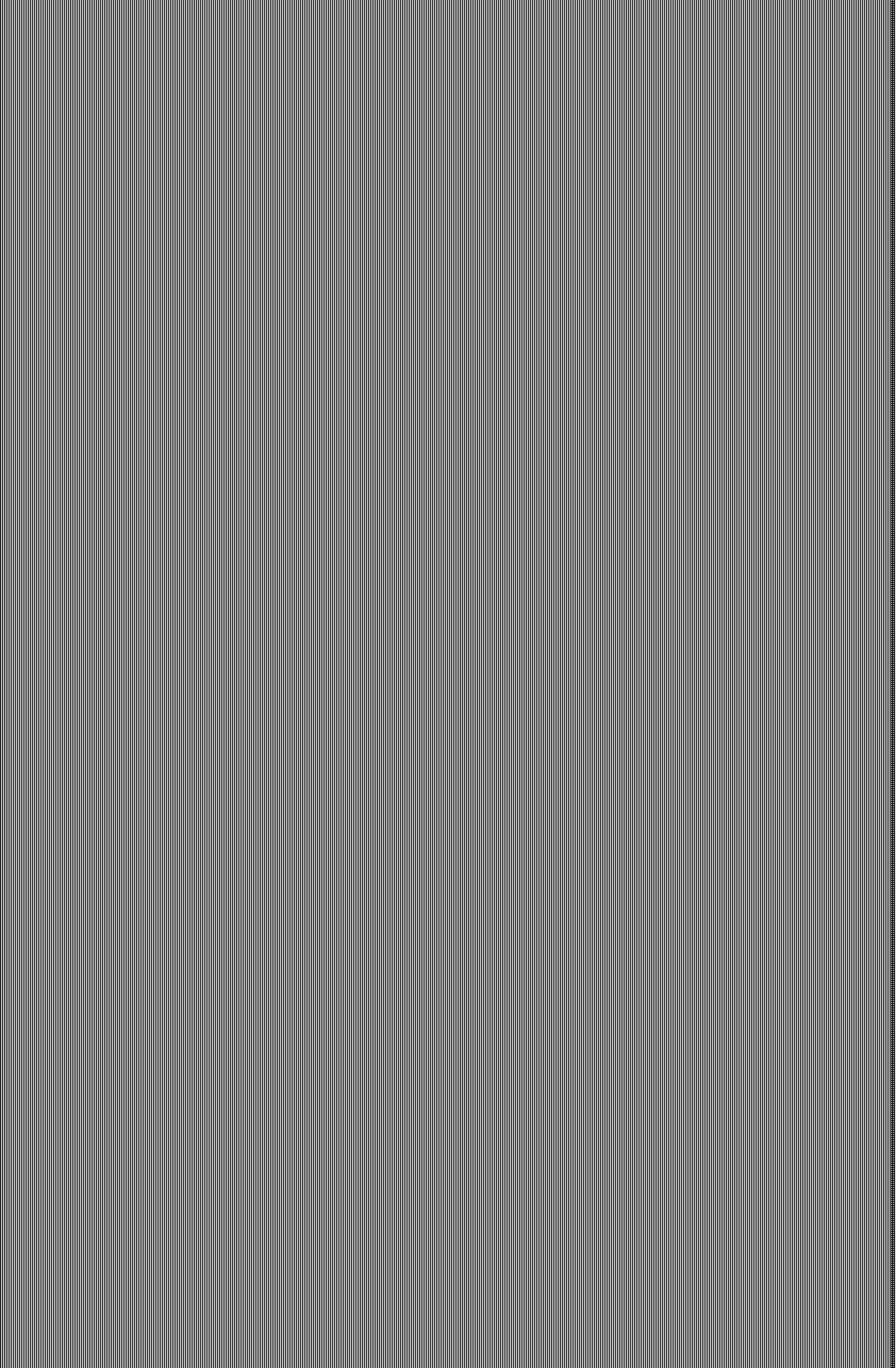
effects of state trading on her terms of trade, should Swedish exporters and importers compete. In a long discussion, variations in exchange rates did not receive any attention; but the planners would watch excessive diversions of exports to countries with soft currencies.²⁸

Conclusion

Most countries are short of resources required for recovery, reconstruction, and industrialization. They look in the direction of the United States to fill the gap in their savings and in their balance of payments. Fulfilment of their plans requires the continued co-operation and generosity of the United States. In 1948, it was hoped that adequate aid would be forthcoming.

In the years, 1943-46, in particular, a large part of the world in order to cover deficits in the balance of payments looked forward to the relaxation of trade barriers, multilateral trade, and the use of flexible exchange rates and temporary loans rather than restrictive trade practices. Unfortunately, the economic recovery and the flow of capital were not adequate to allow countries short of dollars to remove barriers to trade and rely on general measures such as movements in exchange rates. They had to continue to rely on state trading, exchange control, quantitative restrictions on imports, discriminatory practices, and even minute control of sources of imports and destination of exports.

²⁸ *Swedish Trade Policy after the War* (1945), pp. 8, 14-18.



Part Two

THE PLANS

Chapter IX

The United States: An Approach to Planning

Introduction

IN THE American economy, the allocation of economic resources responds to price and income movements. In unusual periods, like the great depression of the thirties and the war which followed, the government through its access to the printing press and banks, and through the assumption of war powers, assumes an increased responsibility for the use to be made of labor, capital and management.

By 1944, a concerted movement was on to impose upon the government the responsibility for sustaining demand and assuring jobs for all. In the ensuing struggle, the net outcome of which was the Employment Act of 1946, those who feared a recurrence of depression gained only a partial victory over those who even more feared government meddling and intervention.¹

This legislation imposes upon the President and his Economic Council a responsibility for studying the level of employment, production and purchasing power, both present and foreseeable trends, and for suggesting policies for attaining the objective of "creating and maintaining, in a manner calculated to foster and promote free competition, enterprise and general welfare, conditions under which there will be afforded use-

¹ See especially *Hearings before Subcommittee on Banking and Currency U.S. Senate on Full Employment Act of 1945*, (revised), July-Sept. 1945.

ful employment opportunities, including self-employment, for the able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power." The Employment Act of 1946 should have the wholesome effect of achieving a better integration of related economic policies, a larger measures of co-operation between Executive and Legislative, and, possibly, a better timing of essential legislation.

One should not, however, expect too much from this Act. The first excerpts in this chapter, which are taken from the *First Annual Report to the President of the Council of Economic Advisers*, gives the underlying philosophy of the Act, and the large issues as the first Council sees them. There follow parts of the *First Economic Report of the President to Congress Under the Employment Act of 1946*.

The main reliance is to be on private enterprise. Indeed, the Council rejects the "blood-letting" theory of the trade cycle and is prepared to prescribe for *cyclical* indispositions, though strangely silent on rheumatic diseases or hardening of arteries, symptoms of economic maturity.

So long as the responsibility lies primarily with free private enterprise, neither the Council nor the President can give a prominent place to planning. They propose numerous short-run measures and long-run policies, but these do not differ substantially from the proposals that might have been expected of a relatively planless society in the thirties. Consider, for example, the excerpt later in this chapter on the long-range programs, which deals with efficiency, productivity, social security, and business cycles.

Perhaps the only significant advance over the thirties is an emphasis on the relation of supply and demand. In these reports, as well as in the *Midyear Economic Report of the President*,² the reader will find an awareness of the need of providing a demand adequate to take what is produced off the market, as well as of the responsibility for absorbing excess purchasing power. Hence, it is necessary to assure flexible pricing; adequate wages; export balances; tax reform favorable to mass spending. Despite a tendency to pooh-pooh public investment or to give it the silent treatment, this concern with total demand registers the influence, conscious or subconscious, of Keynes. As against Keynes, the President and his advisors, however, devote more attention to price-cost relations, high productivity, structural maladjustments—all problems that Keynes was inclined to take for granted rather than discuss.

In a later part of this chapter is found a discussion of the *Nation's Economic Budget*, which offers a panoramic view of the economy, indicates sources of supply and demand, and suggests danger points to the economic practitioner. We can now discover the contributions of govern-

² July 21, 1947; see especially pp. 11-12, 28-37.

ment, business, and consumers to receipts, spending, and saving. From these studies, from those based on further fragmentation of the economic budget, and from forecasts of future receipts and expenditures, we can suggest what remains to be done in order to assure adequacy of demand.³

In summary, the United States by 1948 had not advanced far in the direction of a planned economy. The presentation of an overall plan, with private enterprise responsible for operating most of the plugs on the switchboard; the announcement of some public responsibility for purchasing power and employment; the setting up and examination of the nation's budget which underlines total demand in relation to supply—these are only small advances towards a planned economy.

In the *Economic Report of the President* (January, 1948), a large section was indeed devoted to long-run objectives. It was necessary to develop natural resources and make the fullest possible utilization of human resources, and to introduce institutions and practices (e.g., proper wage-profit and fiscal policies) favorable to a productive economy. *The Midyear Report of the President* (July 1, 1948) contained little other than valuable statistics and a discussion of the dangers of inflation.

The Democratic victory at the polls in 1948 was reflected in a more audacious approach to the problems of planning and government responsibility. The President stressed the importance of considerations of equity as well as stabilization; and although the Council of Economic Advisors disclaimed any support of planning, their proposals in the January 1949 Report were more forthright than they had been earlier.

"Such economic objectives are not to be confused with economic blueprints or plans used in regulated economics. They are conceived simply as bench marks for the orientation of private enterprise and public policies." Nevertheless the Council, on the basis of past history, assumes a growth of output by $2\frac{1}{2}$ per cent per year in the years to come, and on this assumption, makes a careful estimate of investment needs in all major segments of the economy together with serious proposals concerning the development of resources. The Council urges an increase in the proportion of consumption to national output if demand is to be adequate and yet warns that the rise of wages relative to prices may exceed the proportions required to balance the economy, with attendant deflationary effects. In the Council's view, correct wage-price policy unaided by fiscal policy will not assure stability and balanced growth. Indeed, the 1949 Report is not the blueprint of a planned econ-

³ The reader should also consult Dept. of Commerce: *Markets After the War* (1943); and Bureau of Labor Statistics: *Full Employment Patterns, 1950* (Serial R 1868, 1947), the most important studies which attempt to present a model of various categories of expenditures at full employment levels.

omy, for it does not propose an allocation of economic resources and the distribution of the finished product. It does provide, however, for the influencing of allocation, of distribution and of demand by public action, and suggests the broad lines of economic development. Now we reproduce parts of relevant documents.

The Long-Range Program ⁴

The war has left us a tremendously increased productive potential, and further increases are in store. In order to keep our expanding economic activity in line with our growing capacities, the extraordinary post-war demand that we enjoy today must be transformed into sustained demand of an expanding peacetime economy.

Elimination of wartime controls does not mean that we want to go back to the size of economy we had before the war. The possibilities and requirements of a sustained 200-billion-dollar economy differ from those of an unstable 100-billion-dollar economy.

A variety of measures will be needed to fortify the basic structure of the American economy before the transformation from war and reconversion to a high-consumption peacetime economy is completed. We are still at the threshold in formulating a program of consistent policies designed to give business, agriculture, and labor the opportunities which are envisaged in the Employment Act.

A long-range program designed to strengthen the structure of the American economy should include policies toward:

- (1) Efficient utilization of the labor force;
- (2) Maximum utilization of productive resources;
- (3) Encouragement of free competitive enterprise;
- (4) Promoting welfare, health and security;
- (5) Co-operation in international economic relations;
- (6) Combating economic fluctuations.

(1) Efficient Utilization of the Labor Force

The Nation's labor force is its greatest productive asset. Prudent use of our human resources requires a working population not only large and well-trained, but enjoying high American standards of health, education, security, and personal and political freedom.

⁴ *The Economic Report of the President* (transmitted to the Congress Jan. 8, 1947), pp. 22, 24-32.

We must develop and utilize fully the skills of our labor force. We must improve productive efficiency through industrial training and counseling focused on employment opportunities in various occupations, industries, and localities. I am directing the Federal agencies concerned to initiate a study of these programs, in co-operation with state and local authorities, in order to improve such training and services and to remedy inconsistencies and gaps.

The return of the Employment Service to state administration should not result in its disintegration into 48 disconnected pieces, nor in the subordination of the placement service to unemployment insurance. An efficient placement service requires uniform minimum standards and an integrated interstate system for disseminating job information and placing workers across state lines.

We must end discrimination in employment or wages against certain classes of workers regardless of their individual abilities. Discrimination against certain racial and religious groups, against workers in late middle age, and against women, not only is repugnant to the principles of our democracy, but often creates artificial "labor shortages" in the midst of labor surplus. Employers and unions both need to re-examine and revise practices resulting in discrimination. I recommend that, at this session, the Congress provide permanent federal legislation dealing with this problem.

(2) Maximum Utilization of Productive Resources

In our free-enterprise system, we rely mainly upon private initiative to expand the productive base of the economy. Our productive capacity has grown not only through technological developments, but also through a steady stream of additions to plant and equipment. Output per man-hour has increased on the average some 3 per cent per year over the decades.

The whole history of America indicates that this progress can be entrusted mainly to the initiative and inventiveness within our business system. But we do need nation-wide concerted action to remove the fear that demand will periodically be inadequate to absorb maximum production. This is what puts brakes upon inventiveness and initiative.

Even in times of prosperity, aside from war, a substantial portion of our productive facilities has been idle. Recurrent depressions have brought paralysis to as much as one-third or even one-half of our plants and machines.

While the government has a function in the encouragement of new industries and the development and dissemination of research, the greatest incentive that the government can provide for business productivity is through helping to prevent depressions. If production incentives are adequate, business will expand without hesitancy when markets for its

products are reasonably assured through a successful nation-wide program for continuous maximum employment, production, and purchasing power.

(A) *Agriculture.* The soil is one of the most valuable economic assets of the nation. Most effective utilization and conservation of this resource should be an important aim of the agricultural program of the government.

We have experienced amazing technological progress in agriculture and further progress is to be expected. This progress necessitates adjustments in farming, adjustments in the processing and manufacture of foods and clothing, and in the process of distribution.

American agriculture suffered a severe depression in the years following World War I. This situation was generally recognized by all groups. It resulted in large-scale governmental programs to help the farmer get incomes more nearly in line with the incomes of other groups.

The long-range agricultural policy of the government should be aimed at preserving the family-sized farm and preventing another agricultural depression as we go through the readjustments following World War II. It should help to see that farmers' incomes do not fall below those earned by other comparable productive groups. This should involve the least possible interference in the management of actual farming operations. It should be accomplished without use of subsidies so far as feasible. We should seek to make it possible for farmers to earn good incomes through their own efforts.

Above all, the long-range agricultural policy of the government should be based upon the principle of plenty and not upon the encouragement of scarcity. The term "maximum production" in the Employment Act applies to the farm as well as to the factory. This basic policy is inconsistent with a policy of production restriction, though we must take a realistic view of the proportion that agriculture as a whole bears to the economy and also of the relative amount of effort devoted to the several lines of production. Our domestic capacity to absorb the products of our farms—if farmers are encouraged to turn their productive efforts in the right directions—will be enormous as we get nearer to solving the problems of sustained employment and high purchasing power. How much of an export surplus from the United States the markets of the world will be able to absorb will depend in part on our international economic policies, notably as to industrial imports and overseas investments.

Agricultural production increased more than 30 per cent during the war. Technological improvements in farming and in food distribution would make it possible not only to continue this high rate of production, but also to increase it substantially during the next few years.

The high rate of agricultural production during and since the war

has been supported by unusually high rates of food and fiber consumption. For the satisfactory solution of our agricultural problems during the next several years it is essential that we maintain these high rates of consumption, or even increase them. This is desirable not only from the farmer's point of view, but from the point of view of American diets and standards of living.

The Congress has recently authorized a permanent school-lunch program in co-operation with the states. I hope this program will be expanded until we are sure that every American school child gets an adequate diet. In addition, we should study carefully the possible need for food and nutrition programs to reach low-income families.

The Congress also recently authorized a broad and strengthened program to improve the marketing and distributing of farm products. This includes the strengthening of research and educational work, as well as the improvement of the various marketing services performed by the government. We shall need to give increasing emphasis to marketing during the next few years. Better marketing can go a long way toward maintaining adequate rates of consumption, with benefit to farmers and the public alike.

We must honor the government's commitment to support farm product prices during the period of readjustment to a stabilized peacetime basis. However, experience within the past year has demonstrated, on a small scale, some of the dangers that may result from holding the support level for any commodity too high. This only leads to maladjustments within agriculture, to the wastage of food, and to unnecessarily large government expense.

The government's long-range program to support farm incomes at reasonable levels must be kept flexible. It should be designed to encourage adjustments of production in line with the capacity of markets to take products at a price remunerative to efficient farming. It should promote well-managed use of our vast resources of farm land, machinery, and agricultural labor in such ways as to be profitable to farmers and of maximum benefit to the public as a whole.

The standard of living on farms depends on more than the amount of money income received by farmers. Farm communities have never received comparable treatment with cities in such matters as education, housing, medical care, health, nutrition, and social security. Federal and state programs in these fields should give increasing attention to the needs of rural areas.

(B) *Regional development.* Wide regions of this country still hold the promise of tremendous economic development. The government should examine particularly the contribution it can make toward this development by stimulating production and distribution of low-cost

hydroelectric energy, by developing flood control and navigation, by improving roads, by enforcing fair competitive rates of transportation, by removing barriers to truck transportation, by land drainage and irrigation projects. We need to rebuild croplands, grazing areas, and forests. Future programs of resource and industrial development should be prepared so that we can move ahead rapidly at the appropriate time.

Even under today's full employment conditions, there are a few chronically depressed areas, and some areas left stranded by the end of the war. These problem areas were created by the interplay of nation-wide forces, and our government has the responsibility of assisting these communities in developing ways and means of improving their positions. The Council of Economic Advisors will give particular attention to these problems.

(c) *Federal-aid programs.* The federal government is engaged in several programs of grants-in-aid to state and local governments involving large amounts of money. Further programs are planned. These programs, particularly those related to health and education, public works, and road and airport construction, contribute greatly toward bringing all sections of the country up to the levels productivity consistent with American standards of living.

I have asked the Council of Economic Advisors to co-operate with the Bureau of the Budget and other federal agencies concerned, and with state and local advisory committees, to undertake a study of federal grants to state and local governments to determine to what extent revised standards for the distribution of these grants may take into account more fully the needs for support that exist in various parts of the country.

(d) *Public works.* Aggregate expenditures for public works are large. They obviously have a considerable effect upon the whole economy. Further, since many public-works projects are not related to the daily problems of business operations nor to the daily needs of consumers, they are subject to adjustment in their time of commencement and their rate of progress. This had led, particularly in recent years, to an over-emphasis upon the prospects of stabilizing our whole economy through the bold use of public works.

There are valid reasons why public works cannot accomplish as much towards stabilization as some have supposed. In the event of severe unemployment, they cannot be generated in sufficient volume to avoid supplementation by other means. In a period of mild recession, they cannot be generated on time to be fully effective. If the tempo of the public-works program is geared to some business index, the reserves accumulated for emergency use may be used after they are needed and they then become inflationary rather than stabilizing. Even if advance preparations are made through the completion of plans, the acquisition

of sites, and the accumulation of funds, there will be an inevitable time lag between calling the emergency program into operation and the employment of men on the job.

These comments are substantiated by experience. The chief lesson to be learned is that no one device constitutes an adequate safeguard against recession or an adequate fighting apparatus against depression. All useful devices need to be thought through in advance and blended into a consistent program.

Instead of regarding public works as the first and foremost device to restore our whole economy when it sags, we should attempt to stabilize public-works construction according to our long-term needs. Increasing regularization of public-works expenditures at all levels of governmental activity over a long period will offer an assurance of a demand for capital, of a market for materials and equipment, and of a field for employment which will assist in stabilizing that segment of the business world. This approach to public works will have the further advantage of appraising their size and character in terms of our total national needs.

This policy by no means forestalls the expansion of public works as a sustaining factor if recessions or depressions should unfortunately develop despite our best efforts to avoid them. The very procedure necessary or long-term regularized expenditure will pave the way for more effective emergency use than in the past.

(E) *Research and patents.* The United States will this year invest more than one billion dollars in research. In order to protect national security and the development of the domestic economy, I have established by Executive Order a Presidential Research Board to survey Federal research and development programs. The continuance of a research program of large magnitude for many years to come, together with the fact that many of the inventions resulting from it will be patentable, calls for action to protect the public interest in inventions and discoveries resulting from expenditures of public funds. I hope that suitable legislation for a uniform patent policy will be enacted by the Congress at this session.

(3) *Encouragement of Free Competitive Enterprise*

It is imperative that there be no restrictions on free competition resulting in curtailment of production and employment, or in maintenance of high prices, or in interference with freedom to invest funds, or in hampering the entry of new firms to any line of production or trade. I recommend that the Congress review the studies made by the Temporary National Economic Committee and by other Congressional committees with a view toward supplementing or strengthening existing legislation in this field. Among the steps to be taken in the extension of

Section 7 of the Clayton Act to prohibit mergers by the acquisition of assets, as well as by the acquisition of stock control.

(A) *Enforcement of existing anti-trust laws.* The Anti-trust Division of the Department of Justice and the Federal Trade Commission have both labored under inadequate appropriations. They should be better supplied with funds so that their activities can be more closely integrated. Accordingly, I am recommending in the Budget Message increased appropriations for the control of monopolistic practices.

(B) *Encouragement of small business.* The government should take affirmative action to enlarge the opportunities for efficient and enterprising small businesses.

I believe that the government should study ways and means of facilitating the availability of long-term credit and equity capital to small and promising business enterprises.

The Department of Commerce has developed, and will further develop, business service programs providing businessmen with such information on markets and technical and commercial facts as only large establishments can provide by their own staffs.

Consideration should be given to the impact which existing taxes have upon small and growing businesses.

(4) *Promoting Welfare, Health, and Security*

There are certain programs of government which have come to be looked upon as "welfare programs" in a narrow sense. This has placed them in an insulated compartment. They have not been sufficiently related to the needs of the economy as a whole. In fact, they are a part of the problem of maximum employment, production, and purchasing power.

The Employment Act presents the opportunity to abandon this insulation, and to put these programs back in the economic setting from which they must draw their sustenance.

Unemployment insurance is designed to take care of the unemployed as a matter of right rather than of charity, but it also provides purchasing power as a cushion against recessions, and its tax features are of general economic significance. Retirement and pension systems exist to take care of workers who have given of their years in factory, field, or office. But these systems, both on the income and outgo side, have a profound effect upon volumes of purchasing power, and the retirement age needs to be adjusted to the size and composition of our labor force and the trend of improved technologies. Health insurance relates clearly to the efficiency of workers and thus to the productivity of industry and agriculture. And this is even more true of education, which must be reshaped continuously to meet the changing demands and job opportunities of the machine age—or, some day, of the atomic age.

The total amounts of public outlays for these and other purposes need to be measured against the total size of our economy—its wealth and resources today, and the trends and policies which shape its future. Many of these programs have been born of a depression psychology. They have proceeded from the assumption that our enterprise system will necessarily fail to employ given numbers of people from time to time, and that these other programs must be brought forward to prime the pump or fill in the gaps. Here, too, we need a restatement. We should regard them rather as an inescapable obligation of an enlightened people, and we should expand them as our resources permit.

The relationship between these welfare programs and general economic conditions has been inadequately explored. Proposals for maximum employment, production, and purchasing power, and proposals traditionally regarded as being in the general-welfare are, should be integrated because they are interrelated. Further studies will provide the basis for this integration.

(A) *Public health and education programs.* Among those whose income is less than the minimum necessary for a decent subsistence are those who cannot earn their living because of physical unfitness or lack of educational training.

A combination of public health, nutrition, education, and regional development programs would create additional job opportunities and supply workers fit to fill these jobs. Relatively small government expenditures for health and education yield a high national dividend. It is more economical to prepare people to earn a decent living than to care for them through relief.

The federal government is now spending a large amount of money for health and education programs for war veterans, but general expenditures in these fields are relatively small. I urge the Congress to give early consideration to expanded peacetime programs of public health, nutrition, and education.

(B) *Social security.* Although maximum employment would protect wage earners generally from the effects of prolonged mass unemployment, the individual is still exposed to many hazards of economic insecurity.

Our social security program has not kept pace with the times, nor with our increase in general living standards. Many individuals are not covered by the present provisions of the Act, and the benefit payments to those covered are inadequate under to-day's conditions.

I recommend that the Congress, co-operating with the states, take action that will lead to increasing the amount and duration of unemployment benefits. Present unemployment reserve funds are ample to support such increases.

I recommend that the Congress amend the social-security laws to

extend the benefits of old-age and survivors' insurance to the occupational groups now excluded, and to include under unemployment compensation the employees of all establishments, regardless of size, in the industries now covered by the Unemployment Compensation Tax Act. In expanding general social security, the Congress should not overlook the railway workers, whose protection is under separate laws.

While we compensate workers for loss of wages due to unemployment arising from lack of work opportunities, we do not insure them against the risks of loss of earnings from temporary or permanent disability, nor against the costs of medical care. This represents not only a heavy loss for the individual but a great waste of productive manpower.

There is an urgent need to spread the risks arising from sickness and disability by insuring workers against the loss of income and by providing, through social insurance, ready access to essential preventive and curative medical services. I have, in a previous message, presented recommendations for a program of medical care and disability benefits. I urge early consideration of this program.

Our present social insurance system is financed by employee and employer contributions. We must recognize, however, that the employees' contributions and the employers' pay-roll tax curtail mass purchasing power and increase businessmen's costs. From an economic point of view, it would be desirable to finance a part of the social security system out of the general budget. Therefore, I propose that the Congress, in working out a system of financing an expanded social security program, give full consideration to the economic as well as the social import of various methods of taxation for this purpose. 4

(5) Co-operation in International Economic Relations

While most of this Report has necessarily been devoted to the domestic aspects of employment, production, and purchasing power, we must bear in mind that we are part of a world economy. Our sales of goods and services abroad, amounting to about fifteen billion dollars in 1946, played an important role in the maintenance of domestic production, employment, and purchasing power, and may be expected to do so this year. Such a high level of exports reflects in large part the war destruction of productive capacity in other countries. If we are to maintain a well-balanced prosperity over a long period, our foreign trade must be established on a more permanent basis.

In the long run we can sell to other countries only if we are willing to buy from them, or to invest our funds abroad.

Both foreign trade and foreign investment are vital to maintaining a dynamic economy in this country.

The shortages we have suffered during the war and are even now

experiencing have proved to us our need for foreign imports. We will continue to need imports not only to add richness and variety to our standard of living but also as a means of conserving strategic materials. We do not have to fear so-called foreign competition when we have maximum production, employment, and purchasing power. We must not, of course, indulge in indiscriminate reduction of barriers to imports. Such a policy is not contemplated.

For a few years we cannot expect to buy as much from abroad as other countries buy from us. We will find it profitable to invest a part of our savings in developing the world's productive resources through sound loans and investments of equity capital abroad. This is important not only in the first instance as an immediate outlet for our goods and services, the supply of which will be increasing in the coming years, but also as a means of permanently increasing foreign markets for our farmers and businessmen. The quickest demonstration of this can be seen by the fact that nations that are industrialized are our best customers.

Many countries fear economic depression in the United States as a threat to their own stability. If faced with the alternatives of smaller trade and economic insulation on the one hand or close relations with an unstable American economy on the other, many might prefer some insulation as the lesser evil.

In preference to either of these alternatives, these countries would choose closer relations with a stable American economy operating at high levels. They have already begun to co-operate toward achieving these related goals: economic stability and expansion of world trade. The International Monetary Fund, designed to stabilize exchange rates, and the International Bank for Reconstruction and Development, set up to facilitate the international flow of capital, have already started to operate. At our initiative, experts of eighteen important governments recently worked out a tentative charter for an International Trade Organization. This charter embodies principles of commercial conduct designed to enlarge the beneficial flow of world trade, to reinforce the domestic employment and development programs of the co-operating governments and, by intergovernmental commodity agreements, to remove the depressing effects of burdensome world surpluses. This charter represents the first major effort in the field of trade to replace unilateral action—which often injured other countries and provoked retaliation—by co-operation, and joint action under a set of common principles. Continued progress in the formation of the International Trade Organization represents the most important step that we can take to re-establish a high volume of foreign trade on a sound basis.

The willingness of many other countries to enter the proposed trade organization will depend to a great extent on our attitude in connection with the reciprocal tariff negotiations scheduled for this year. In return

for our own tariff concessions, we can hope to secure not only reduction of foreign tariffs and discriminations but also elimination of a mass of restrictions, in particular, rigid import quotas preventing our access to foreign markets. Thus we should press forward with our program to secure the reciprocal reduction of trade barriers.

If we fail to do our part in putting international economic relations on a healthier basis, it is quite likely that some other countries will feel compelled to increase their own controls. Such a development would tend to break the world into trading blocs and could have profound effects upon world politics and the prospects for creating an enduring peace.

(6) Combating Economic Fluctuations

Only by blending all practicable programs in wise proportions can we be successful in stabilizing our economy at the highest feasible levels. The long-range policies I have outlined are designed to strengthen the structure of the economy and to reinforce its resistance to economic fluctuations.

The greater this power of resistance, the less need there will be for some of the limited and specialized stabilizing devices which have received much attention in recent years.

I have directed the Council of Economic Advisers and the other appropriate government agencies to make a continuing study of the stabilization devices that may become necessary and to recommend their being placed in operation in ample time to insure the anticipated effect.

Among these devices are a well-integrated program of employment stabilization; improvements in the process by which workers find jobs and employers find workers; improvements in the tax structure; wise management of the public debt; and a flexible credit policy.

Continuing policy cannot be extemporized from month to month or even from year to year; most policies designed to increase the stability of the economy are of long-range character. Fortunately, we have time in which to plan deliberately and wisely, and in which to secure the co-operation of all our citizens in driving toward our common goal: an expanding economy of maximum production, employment, and purchasing power under a system of free competitive enterprise, with full recognition of the duties and responsibilities of forward-looking government.

The Employment Act of 1946⁵

Here, for the first time, the Congress has spelled out in unequivocal terms as a "continuing policy and responsibility of the federal govern-

⁵ Council of Economic Advisers: *First Annual Report to the President* (Dec. 1946), pp. 4-8.

ment" something which hitherto had only fallen somewhat ambiguously within the general welfare clause of the Constitution. Now

the Congress hereby declares that it is the continuing policy and responsibility of the federal government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy . . . to co-ordinate and utilize all its plans, functions, and resources for the purpose of creating and maintaining . . . conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power.

A mandate is thus laid on the President and the whole executive establishment and upon both Houses of Congress to pursue this goal of promoting maximum productive use of the nation's resources, natural and human, thereby providing work opportunities as ample as are practicably possible for those who are anxious to apply their labor to the supplying of their wants.

It should be clearly noted that the act is called the Employment Act of 1946, avoiding the vague—and in some quarters alarming—use of the term "full employment." There is in it not the slightest hint that anyone is to be coerced or constrained to labor more than he wants to, with inferior equipment, or at anything other than the calling of his choice. The act stresses maximum production and the purchasing power that makes for high consumption; it does not stress mere number of jobs. The freedom of the worker is fully protected by the expression "willing and seeking to work." The danger of resort to leaf raking or digging holes and filling them up is guarded against by the expression "useful employment opportunities."

Finally, it is part of the broad policy of the act that, in carrying out a central responsibility for promoting high production and the general welfare, the federal government should co-ordinate its program and activities with those of State and local governments on the one hand and of private business agencies—industry, labor, and agriculture—on the other. It is to operate "in a manner calculated to foster and promote free competitive enterprise." Likewise, it is the expressed policy of the act that the Council of Economic Advisers, which it sets up, shall be closely articulated with other agencies of the federal government operating in the economic area and that its work shall be co-operatively related to theirs, co-ordinating rather than superseding their functions.

(1) Machinery of the Act

We turn now from the political philosophy of the Employment Act, as embodied in its statement of purpose and of general method or range

of methods, to note the governmental machinery through which this purpose is to be attained. The measure as enacted is fully within the existing frame of government. It does not set up any authoritarian board or official dictator of labor, of plant, or of production. The traditional division of function between the executive and legislative branches of the government is fully preserved and, as already mentioned, the complementary relation between federal and state government. In the machinery of the act, however, something has been added to our customary equipment for handling matters that concern the nation's economic life. No longer is the study of the multifarious economic problems of the country and the formulating of executive programs for dealing with national economic welfare to be merely scattered among the federal departments and independent commissions or the still more numerous bureaus and divisions within these agencies. Instead, a means is provided for reviewing and synthesizing all these studies, conclusions, and recommendations into a single co-ordinated whole.

To this end, the President is called upon to send to Congress at the beginning of its session an Economic Report

setting forth (1) the levels of employment, production, and purchasing power obtaining in the United States and such levels needed to carry out the policy declared in section 2; (2) current and foreseeable trends in the levels of employment, production, and purchasing power; (3) a review of the economic program of the federal government and a review of economic conditions affecting employment in the United States or any considerable portion thereof during the preceding year and of their effect upon employment, production, and purchasing power; and (4) a program for carrying out the policy declared in section 2, together with such recommendations for legislation as he may deem necessary or desirable.

The new machinery set up for (a) preparing and (b) dealing with the Economic Report of the President consists of two parts: The Council of Economic Advisers to the President and the Joint Committee of Congress on the Economic Report.

The Employment Act establishes in the Executive Office of the President a Council of Economic Advisers, consisting of three economists, who, with the aid of the necessary staff, are to "assist and advise the President in the preparation of the Economic Report . . . analyze and interpret economic developments, to appraise programs and activities of the government in the light of the policy declared in section 2, and to formulate and recommend national economic policy to promote employment, production, and purchasing power under free competitive enterprise."

It was clearly the intent of the framers of the act that this shall be a small co-ordinating agency immediately adjacent to the President and effecting liaison between him and the vast area of technical services dealing with economic matters already available within the governmental establishment. It is not itself to be a fact-finding agency or one doing original statistical or economic research. . . .

It is not within the province of this Council to elaborate on the functions of the other agency set up under the Employment Act, namely, the Congressional Joint Committee on the Economic Report. It should be noted, however, that the act in no way trenches on the primacy of the Congress in the field of final policy making. It simply sharpens that body's tools for evaluation of proposals made by the President as well as for the initiation of proposals of its own. Obviously, the joint committee will have at its disposal the improved facilities made available under the Congressional Reorganization Act as well as recourse to those contacts with all governmental and nongovernmental sources of facts and ideas which are the traditional prerogatives of Congress.

In the words of the act: "It shall be the function of the joint committee—(1) to make a continuing study of matters relating to the Economic Report; (2) to study means of co-ordinating programs in order to further the policy of this Act."


When the President's Economic Report is presented to the Congress at the opening of its session, it is to be referred to this joint committee. After study of the proposals embodied in the President's economic program and in the light of such studies as the committee may already have conducted into the economic problems which it considers pertinent, it will prepare "its findings and recommendations with respect to each of the main recommendations made by the President in the Economic Report" and submit them to the two Houses of Congress by February 1. This congressional report is designed to be "a guide to the several committees of the Congress dealing with legislation relating to the Economic Report."

The outstanding feature of this procedure is that it tends to unite the President and Congress through mutual consideration of national economic policy as a co-ordinated whole instead of proceeding in an unrelated piecemeal fashion. It guards against the danger that economic legislation shall be incomplete, inconsistent, or directly conflicting, much as the creation of the Bureau of the Budget 25 years ago undertook to remedy the haphazard process of estimating fiscal needs and allocating public revenues.

Besides its February 1 report, the joint committee may also "from time to time make such other reports and recommendations to the Senate and House of Representatives as it deems advisable."

(2) *The Council a Consultative and Advisory Body*

A final point as to the political science aspect of the Council of Economic Advisers is that, although set up as an arm of the Executive Office, the Council as such does not have any administrative powers or responsibilities. It is purely a consultative and advisory agency. Besides its duty to "assist and advise the President in the preparation of the Economic Report" it is to "analyze and interpret . . . developments and trends . . . appraise the various programs and activities of the federal government in the light of the policy" of promoting maximum employment, production, and purchasing power, and make interim and supplementary studies either on its own initiative or at the request of the President. Thus it is designed to serve as a continuous agency of counsel to the President on the professional plane in regard to administrative decisions as well as his approval—or even veto—of legislative proposals.



The Nation's Economic Budget ⁶

The Nation's Economic Budget is designed to depict the flow of funds by which major economic groups are interrelated in the national economy. To this end it shows income and expenditures for consumers, businesses, and government, as well as the balance of international trade. Broadly speaking, the decisions to spend or to save of each of these groups of consumers may be considered as springing from a different set of considerations than those of the other groups. The results of these decisions are embodied in four sets of accounts comprising the nation's budget.

(1) *Expenditures*

The expenditure side of the accounts is clear and unambiguous. The meaning of consumer expenditures is just what the name implies. One exception may be mentioned: residential construction is included with all other construction in business outlays. Business expenditures are not the total expenditures of business, but only that part which consists of additions to or replacements of plant, machinery or other equipment, and additions to inventories (exclusive of inventory revaluation). In contrast, the operating expenditures of business are part of prices charged the consumer, so that including them would involve double

⁶ *The Economic Report of the President* (transmitted to the Congress Jan. 8, 1947), pp. 35-40.

counting. The international expenditure figure consists of the net balance of receipts from the sale of goods and services over payments, since it is this portion which is not balanced by an equivalent amount of foreign goods and services added to the domestic supply. Government expenditures consist mainly of payments for goods and services currently rendered, but include certain other types of payments. In summing the components the latter are deducted as adjustments to obtain the total national expenditure for goods and services, which is equal to the value of gross national production.

(2) Income

The production of the national product involves an equivalent flow of income to individuals or businesses or government producing the product. The manner in which income is allocated to consumers, business, and government is somewhat complicated, however.

Consumers' earned income consists of salaries and wages, dividends, income of farmers and other unincorporated business, and interest, rents, etc., going to individuals and fiduciaries. Income earned in production is not equivalent to income available for spending by consumers, however, and it is the latter quantity which is of more significance for the analysis of economic flows. Both additions and deductions must be made from earned income to arrive at spendable or disposable income.

In each period, sizable additions to consumers' earned income are made by the government. For example, in 1946 servicemen received mustering-out pay and dependency allotments and veterans received pensions and readjustment allowances. Old-age benefits from the social-security funds were a further addition to consumers' disposable income. On the other hand, in each period, pay-roll, income, and estate taxes are deducted from the total of consumer income. The residual income constitutes the disposable income of consumers appearing in the Nation's Economic Budget table.

Of the income going to business, some is withdrawn by the government in the form of corporation income taxes, excise taxes, and other business taxes. The residual income of business, after payment of dividends to shareholders, consists of additions to reserves, and corporate undivided profits. Undivided profits and reserves of all business (with some adjustments to put the figures on a cash basis) comprise the receipts appearing in the Nation's Economic Budget table.

No entry is made on the receipts side of the international account, since the excess of expenditures over income is shown in the expenditure column.

Government income is obviously the sum of business, pay-roll, and

personal taxes, plus some miscellaneous income obtained from the sale of surplus property, contract settlement, etc.

(3) Surplus or Deficit

The Nation's Economic Budget table shows that total expenditures equal total incomes. This means that savings of some groups must equal the deficits of other groups. Expressed somewhat differently, withdrawals from the income stream (savings) by some groups are offset by additions to the income stream (deficit or investment) by other groups.

The sum of the incomes of all groups is in excess of the incomes derived from the productive process, however, because it includes the "unearned" (or transfer) incomes previously mentioned. These transfer incomes, along with the expenditures which give rise to them, do not reflect a current addition to goods and services and must, therefore, be deducted in order to arrive at the national production of goods and services. This is done by the adjustment shown at the bottom of the table. The deduction from incomes is equal to that from expenditures, unless there are transfers abroad. No deduction need be made from incomes for transfers abroad, since they do not directly augment domestic spendable funds.

The sum of income or expenditures, less the adjustments for transfers of purchasing power, is the gross national production of goods and services. By making an allowance for wear and tear upon existing machinery and equipment and depletion of natural resources, the net national production is determined.

Sections (a) through (f) below contain a somewhat more detailed description of the accounts of consumers, business, and government and of international transactions, which appear in the nation's budget table. The basic estimates of economic magnitudes are the gross national product, national income, and related series of the Department of Commerce. The series for Government receipts and expenditures conform to the concept of cash receipts from and payments to the public as presented in the Budget of the United States for fiscal 1948. Minor adjustments between these series and the gross national product series are necessary because the latter are not on a cash basis.

Substantial revisions of the Department of Commerce series, involving changes in classification of some components, are expected to be published in the near future. These will hardly change the significance of the Nation's Economic Budget picture, however. Estimates for 1946 are based on incomplete data and are consequently tentative.

(a) Consumers' account. The account of consumers' receipts, expenditures, and savings is shown in detail:

CONSUMERS' ACCOUNT ⁷

(Billions of dollars)

	1939	1944	1946 ⁸
1. Receipts:			
2. Disposable income of individuals	67.7	137.4	145
Less:			
3. Adjustment to Federal cash income and expenditure series	.3	2.2	2
4. Adjustment for discrepancy		2.2	1
5. Equals: Adjusted disposable income	67.4	133.0	142
6. Expenditures:			
7. Durable goods	6.4	6.7	14
8. Nondurable goods	32.6	60.0	77
9. Services	22.7	31.8	36
10. Total	61.7	98.5	127
11. Excess of receipts: Savings	5.7	34.5	15

LINE 2: The derivation of disposable income of individuals from incomes received in producing the gross national product is shown below.

LINE 3: The adjustments are as follows:

(a) The excess of tax payments made by the public through pay-roll deductions or other means over receipts by the government is added back into consumer disposable income.

(b) Benefit payments from national service and government life insurance are added.

(c) Premiums paid for government insurance and other payments to trust accounts are deducted, since they become part of federal cash income.

(d) The net accrued interest on federal debt held by the public is deducted, since it is not part of federal cash outgo.

LINE 4: This adjustment is necessary because the gross national product as estimated from the income side was somewhat higher in 1944 and 1946 than as independently estimated from the expenditure side. The whole of this discrepancy, which arises from statistical imperfections, is here deducted from consumer incomes.

LINE 7: Does not include expenditures for residential construction even though financed and occupied by owners. These are included with private capital formation.

LINE 11: Includes savings of unincorporated business.

(b) *Business account.* A detail of the business account follows. Profits are those of incorporated business only, while expenditures include the expenditures of both corporate and unincorporated business (including farms) and residential construction (including that financed

⁷ Detail may not add to total due to rounding.

⁸ Preliminary estimates.

DERIVATION OF DISPOSABLE INCOME OF INDIVIDUALS⁹

(Billions of dollars)

	1939	1944	1946 ¹⁰
1. Gross national product	88.6	197.6	194
Less:			
2. Depreciation depletion and other reserves	7.7	9.6	10
3. Inventory revaluation	—4	—1	—4
4. Business taxes	10.4	29.7	25
5. Adjustment for discrepancy	0	—2.2	—1
6. Equals: Net national income	70.8	160.7	164
7. Plus: Transfer payments to individuals	2.4	5.3	11
Less:			
8. Corporate undivided profits	.4	5.4	7
9. Contributions to social insurance funds	2.0	3.9	4
10. Equals: Income payments to individuals	70.8	156.8	164
11. Less: Personal taxes and nontax payments	3.1	19.4	19
12. Equals: Disposable income of individuals	67.7	137.4	145

LINES 1-12: For a description of these series, see *Survey of Current Business*, May and August 1942, and March 1943.

and occupied by owners). Depreciation and other reserves also include allowances for unincorporated enterprise and dwellings. Unincorporated business savings are not included in business income because of the difficulty in separating them from income of individuals.

(c) *International account.* Expenditures of foreign countries in the United States are reflected in current exports of goods and services. Only the net balance of exports over imports and unilateral transfers is included in the Nation's Economic Budget, since other exports are matched by an equivalent volume of imports. Exports include transfers of surplus property abroad.

(d) *The government account.* The government account includes revenues and expenditures for all governmental units—federal, state, and local.

Federal receipts are cash receipts from the public, except from borrowing, and expenditures are cash payments to the public. The public includes individuals, private corporations, and state, local, and foreign governments. The cash receipts and expenditures series presents the financial operations of the government as a unit. Government trust accounts and government-owned corporations are considered part of the government, and the effect of transactions among these units is eliminated. Noncash payments to the public, such as accrued interest on government bonds, are not included. Cash receipts and expenditures

⁹ Detail may not add to total due to rounding.

¹⁰ Preliminary estimates.

BUSINESS ACCOUNT¹¹

(Billions of dollars)

	1939	1944	1946 ¹²
1. Receipts:			
2. Corporate profits before tax	5.5	24.9	20.5
Less:			
3. Corporation income tax liabilities	1.3	15.0	8.0
4. Dividends	3.8	4.5	5.5
5. Equals: Corporate undivided profits	.4	5.4	7.0
Plus:			
6. Business reserves, depreciation and depletion	7.7	9.6	9.5
7. Government payments to business	.5	.6	4.2
Less:			
8. Inventory revaluation adjustment	.4	.1	3.5
9. Payments by business to government		4.2	6.4
10. Equals: Adjusted corporate profits and reserves	8.3	11.3	10.8
11. Expenditures:			
12. Construction	3.6	1.6	8.0
13. Residential	2.0	.5	3.0
14. Nonresidential	1.6	1.1	5.0
15. Producers' durables	5.5	4.0	13.0
16. Net change in inventories	.9	-1.7	6.0
17. Total, gross domestic capital formation	9.9	3.9	27.0
18. Excess of receipts (+), or expenditures (-)	-1.6	+7.4	-16.2

LINE 2: Department of Commerce concept which differs from that of the Bureau of Internal Revenue. Excludes profits arising from the sale or exchange of capital assets.

LINE 6: Includes depreciation and depletion, other business reserves, and capital outlays charged to current expense.

LANE 7: Includes refunds of business taxes, loan transactions of government corporations, capital transactions, renegotiation of war contracts and miscellaneous items.

LINE 9: Includes renegotiation payments made in discharge of previous liabilities and excess of business tax payments over liabilities.

rather than budgetary receipts and expenditures were chosen in order to give a better picture of the economic effect of the financial operations of the government.

(e) *Adjustments.* In order to derive an estimate of the national production of goods and services, expenditures which do not involve pur-

¹¹ Detail may not add to total due to rounding.

¹² Preliminary estimates.

GOVERNMENT ACCOUNT¹³Federal, State, and Local
(Billions of dollars)

	1939	1944	1946 ¹⁴
1. Receipts:			
2. Federal receipts from the public other than borrowing	6.5	48.6	45.5
3. State and local	8.9	10.1	11.2
4. Total	15.4	58.7	56.7
5. Expenditures:			
6. Federal	9.4	95.3	44.7
7. State and local	9.1	8.5	10.0
8. Total	18.5	103.8	54.7
9. Excess (+) or deficit (—)	—3.1	—45.1	+2.0

chases of current output must be eliminated. Correspondingly, a deduction must be made from the income side of the account for income not derived from current production. A detail of the expenditure adjustments is shown here.

(f) *Gross and net national product.* The expenditure side of the accounts is summarized below. The adjustment for noncash expenditures and for transfers to the public and abroad is deducted to obtain the gross national production of goods and services. The gross national product contains an element of duplication, however. Replacement costs are included in business expenditures; as depreciation they are also included in the price of goods and services paid by the consumer or government. By deducting an allowance for depreciation and depletion, duplication is eliminated and the net output of the economy is obtained, as shown here.

Long-Range Objectives for the American Economy (1948)¹⁵

(1) *Our Ability to Grow*

While striving to overcome the inflation of today, we cannot safely neglect the problems of tomorrow. No great nation lives for the moment alone. In restraining the excessive demand which is now apparent,

¹³ Detail may not add to total, due to rounding.

¹⁴ Preliminary.

¹⁵ The Economic Report of the President Transmitted to the Congress, Jan. 1948, pp. 53-62, 75-89.

ADJUSTMENT ¹⁶

Reconciliation between Government Cash Expenditures and Expenditures
for Goods and Services
(Billions of dollars)

	1939	1944	1946 ¹⁷
1. Cash expenditures—federal, state, and local	18.5	103.8	54.7
Less:			
2. Transfer payments—			
3. To individuals	2.4	5.3	11.1
4. To business	.5	.6	4.2
5. Abroad		1.5	4.6
6. Benefit payments national service and government life insurance			.2
7. Refunds to individuals		.3	1.5
Plus:			
8. Noncash expenditures for goods and services:			
9. Net accrued discount on United States securities		.3	.6
10. Government contributions to retirement funds	.2	.3	.4
11. Interest on trust-fund investments	.1	.3	.6
12. Federal employees contributions to retirement funds	.1	.2	.3
13. Expenditures for goods and services	16.0	97.1	35.0

LINE 1: See section (d) above.

LINE 3: Includes veterans' pensions and training and readjustment allowances, servicemen's allowances to dependents and mustering-out pay, cash terminal leave pay, public assistance, unemployment compensation, old-age and survivors' insurance, etc. These payments constitute a transfer of purchasing power from the governmental units to individuals, and consequently should not appear in the gross national product.

LINE 4: See "Business Account," line 7.

LINE 5: Includes loans to foreign governments, subscriptions to international organizations, reimbursable lend-lease, etc. Since this expenditure has not been included in the income of any domestic group, no deduction from income needs to be made for this item. However, it must be deducted from expenditures.

LINES 8-12: These noncash expenditures are considered part of the gross national product and must be added to cash payments.

we must not cripple the market for an expanding output of American industry and agriculture. Our whole history shows that unless we go forward we shall slip backward. Our economy should be stable, but nonetheless it must continue to grow.

We cannot set aside long-range considerations while we deal with

¹⁶ Detail may not add to total due to rounding.

¹⁷ Preliminary.

RECONCILIATION BETWEEN THE GROSS AND NET
NATIONAL PRODUCT ¹⁸
(Billions of dollars)

	1939	1944	1946 ¹⁹
1. Expenditures:			
2. Consumer (purchases of goods and services)	61.7	98.5	127
3. Business (private domestic capital formation)			
4. Net exports	9.9	3.9	27
5. Government (cash payments to the public)	.8	-1.8	5
6. Total	18.5	103.8	55
7. Less: Adjustments	90.9	204.4	214
8. Equals: Gross national product	2.5	6.8	20
9. Less: Depreciation and depletion	88.6	197.6	194
10. Equals: Net national product	6.9	9.1	9
	81.7	188.5	185

LINE 7: See section (e) above.

LINE 9: Includes capital outlays charged to current expense.

LINE 10: This is not conceptually the same as the net national income as defined by the Department of Commerce, which excludes both depreciation and depletion and business taxes.

the immediate task of combating inflation. The Employment Act requires that we set objectives for the needed levels of employment, production, and purchasing power. Such objectives require that we look ahead and appraise our economic potentials in the perspective of long-range economic growth.

The best way to realize the growth that we can achieve is to look at what we have recently done. The Nation's Economic Budget has already been used in this Report as a summary device to depict the present state of our economy. In the table following, it is used to show the enormous strides that we have made since just before World War II, with the figures adjusted to allow for price changes.

No one can fail to be impressed by the fact that, within eight years, our annual national product has increased by about 53 per cent measured in constant prices. Some part of this increase is explained by the fact that our economy in 1939 was not running at maximum employment or production. The relentless pressure of the war speeded up certain economic developments. The American people hold a profound conviction that our war-time production record furnishes a significant demonstration of what we can do with maximum employment and effective economic policies.

¹⁸ Detail may not add to total due to rounding.

¹⁹ Preliminary.

THE NATION'S ECONOMIC BUDGET IN CONSTANT DOLLARS

(Calendar years 1939 and 1947)

Accounts	Billions of dollars, first half of 1947 prices						Per- cent In- crease 1939- 47
	Calendar year 1939			Calendar year 1947 ²⁰			
	Re- ceipts	Ex- pend- itures	Excess (+) or deficit (-)	Re- ceipts	Ex- pend- itures	Excess (+) or deficit (-)	
Consumers:							
Disposable income	112.5			171.0			52
Expenditures		108.2			160.2		48
Saving (+)			+4.3			+10.8	151
Business:							
Undistributed profits and reserves	13.1			17.1			31
Gross private domestic investment:							
New construction		7.4			10.2		38
Producers' durable equipment		6.4			17.3		170
Net change in in- ventories		.6			2.1		250
Total		14.4			29.6		106
Excess of re- ceipts (+) or investment (-)			-1.3			-12.5	862
International:							
Net foreign invest- ment		1.3			8.4		546
Excess of receipts (+) or invest- ment (-)			-1.3			-8.4	546
Government (Federal, State, and local):							
Cash receipts from the public	27.0			59.4			119
Cash payments to the public		31.7			53.6		69
Excess of receipts (+) or payments (-)			-4.7			+5.8	
Adjustments to arrive at gross national product	-5.1	-8.1	+3.0	-21.2	-25.5	+4.3	
Total gross national product	147.5	147.5	0	226.3	226.3	0	53

²⁰ Estimates based on incomplete data.

In recent years, a number of attempts have been made by private and public research agencies to measure the growth that lies ahead if we are successful in maintaining maximum levels of economic activity. These studies recognize that foresight is not perfect and that our knowledge of technological trends and economic relationships is still limited. Further improvements in these measurements are needed. But even now, they can serve to furnish us at least with some broad outlines of our prospects and problems.

Ten years from now, if we maintain maximum employment, we should reach a level of nearly 64 million jobs. This allows for population growth. It also allows for withdrawal from the labor force of some women to their homes and for longer school attendance of some of our young people.

Output per man-hour for our economy as a whole has increased by approximately 2 per cent annually in recent decades. The war brought many technological advances which have not yet been adopted fully by peace-time industry. Assuming even the very conservative estimate of 2 per cent annual increase in productivity, and allowing for population growth, maximum production ten years hence would mean an increase of about 35 per cent in our total output of goods and services if average weekly hours of work remain unchanged. This would mean per capita disposable income about 80 per cent above the level of 1937 and 27 per cent above the level of 1947 in terms of constant dollars. Some part of this possible increase may, of course, be taken in the form of increased leisure.

We have within our reach an economic environment that would make it unnecessary for masses of people to be undernourished or ill-housed, to work in obsolete plants and shops, or to lack essential medical care, social security, or education. No one would need to go without adequate rest and vacation after hard work. Attainment of these economic objectives would afford ever-increasing opportunities for individual initiative and greatly strengthen the cherished free institutions of American life.

But these gains will not come by accident. They would not be registered in an economy characterized by a period of idle or wasted resources after any period when for a few years we attain full utilization of our plant and labor force, or in an economy running at only three-quarter capacity even in "fairly good times." The attainment of our objectives will depend upon the best efforts of industry, agriculture, and labor, working with sympathetic understanding of one another's problems and of the common good. It will depend on a clear appreciation of maladjustments in the relationships among production, prices, and purchasing power; it will depend upon the willingness of all concerned to make necessary adjustments, and upon vigorous and forward-looking government.

(2) *Development of Natural Resources and Capital Equipment*

In the perspective of balanced economic expansion for the future, our first attention should be concentrated upon our productive resources, developed and potential, and the ways in which these resources are utilized. Since the beginning of the war, we have been forced to forego at many points development of our basic natural resources and the essential maintenance and improvement of our capital facilities.

Improvement of the country's natural resources and its capital equipment is a co-operative effort. Private groups and individuals, state and local governments, as well as the federal government, are challenged by the task. An expanding base of natural resources and capital equipment is necessary for the realization of increasing production and a rising standard of living.

[Natural Resources]

(a) *Land.* To meet the needs of a population of perhaps 175 to 185 million persons by 1975 living in an economic environment of sustained maximum employment and production with a considerable volume of agricultural exports, would require an increase of about 30 per cent in agricultural production. It would also require a substantial shift in the pattern of agricultural land use to meet changes in demand.

The yield of present cropland can be enlarged by improvements in plant breeding, increased use of machinery, supplemental irrigation, increased use of fertilizers, and more efficient marketing. To some extent, we can also increase production by adding to cropland through drainage, clearing, and irrigation.

Erosion of top soil and depletion of soil fertility are becoming more and more serious. About 60 million acres now cultivated should be used for grass and trees. Despite significant progress in soil conservation in recent years, half the nation's cropland and pasture still needs to be put under improved soil-management practices as rapidly as possible. Expanded research, education, and demonstration programs are required. We need a nation-wide program for increased application of fertilizers to depleted soils.

About half our acreage of farm pastures and range land has been impaired seriously by overgrazing, fires, and other abuses. Large tracts of land which should be ranges have been plowed for wheat. Higher levels of meat consumption can be met only if individual farmers and stockmen who own two-thirds of the country's range-land adopt better grazing practices. The 300 million acres of western grazing land controlled by the federal government, much of it organized in grazing districts, is being improved, but a large part of it requires further rehabilitation.

(*b*) *Water*. Bound up as they are with land uses, water resources should be developed and controlled as an integral part of a broader national and regional resources-development program. Expanding programs are needed to prevent floods, provide for navigation, furnish urgently needed power, promote recreation, control pollution, conserve fish and wildlife, and maintain and improve underground and surface water supplies needed for agriculture and other uses.

An impressive example of the interrelated nature of water and land resources is provided by large multiple purpose dams and accompanying watershed programs. Such integrated programs should be stepped up, as soon as economic conditions permit, in a number of our larger river basins.

(*c*) *Forests*. The estimated 461 million acres of private and public commercial forest land in the country ultimately will grow all the timber products we are likely to need, provided they are well managed. The problem is most acute in saw timber. Our present saw-timber stand is less than half that in 1909, and is poorly distributed and deteriorating in quality and size. Better forest practices would provide the greatest assurance of adequate supplies for the future. Achievement of better practices may be furthered by strengthening and expanding technical and other assistance to private forest landowners, including farmers. In addition, multipurpose development of the national forests and other federal forest land should be pushed to help meet national needs.

(*d*) *Minerals*. Ample supplies of all essential minerals are vital to an expanding economy and for the nation's security. Those minerals with which we are well endowed, such as coal and phosphates, should be mined and utilized efficiently. Those minerals for which we depend on foreign sources, such as tin, antimony, chromite, and strategic mica, will continue to require stockpiling and intensive search for substitutes and alternative sources of supply. Finally, those minerals for which we depend partially on foreign sources, such as zinc, lead, copper and, increasingly, high-grade iron ore, call for policies which emphasize stepping up the rate of discovery, improving mining methods, and developing commercial processes for the utilization of low-grade ores. For petroleum, new techniques and sources of supply from coal, natural gas, and oil shale will have to be increasingly relied upon to prevent the reserve situation from deteriorating and to meet the rapidly growing demand.

(*e*) *Regional development*. Some large regions in the country possess the basic raw materials, population, and locational advantages to support a much higher standard of living, but are below the national average in material well-being. They require large-scale developmental efforts both for their own benefit and to contribute in larger measure to the national welfare. The objective should be to narrow such differentials

by raising productivity and incomes in the lagging regions, particularly through improvement in agricultural methods and land uses, further industrial expansion and diversification, and lifting education and health levels.

In recent years, large parts of the West have been growing, in terms of per capita income and production, at rates well in excess of national averages, but they are so meagerly equipped with capital and population that they may accurately be termed underdeveloped. Programs for the development of these regions are practical and productive, and should be continued.

The Territory of Alaska furnishes a special case. Because of its resources and its strategic location as our last northwest frontier, a concerted and expanded effort on the part of public and private agencies and individuals for the rapid economic and social development of Alaska is required.

Regional development requires integrated programs of business, labor, agriculture, and all levels of government. The Council of Economic Advisers, in co-operation with other agencies of the government, is studying this problem.

[Business Plant and Equipment]

(a) *Productive capacity.* A growing economy requires balanced expansion of our capacity to turn out consumer goods and crude and semi-finished materials and equipment.

For the greater part of the last two decades, business expansion has been irregular. In the worst depression years of the 30's, outlays were insufficient even for normal replacement. The table below, which covers producers' durable equipment, shows how the rate of expansion varied from decade to decade before the war.

New stimulus to business investment came with the defense program of 1940-41. But during the war, though certain critical facilities were expanded, we had to curtail many lines of civilian goods and expansion of all facilities not contributing to war production. After fifteen years of depression and wartime restriction, productive capacity was highly unbalanced and generally inadequate to meet the peacetime demand. The high rate of investment in new equipment during the past two years reflects in part the efforts of producers to make up the deficiencies.

In some industries, present capacity appears adequate for the near future. In others, such as electric power and petroleum refining, expansion of capacity is substantial and is likely to continue for a considerable period until a better balance between demands and capacity has been reached. In a few industries, net capacity expansion during 1947 was less than that required annually to sustain maximum production and employment.

GROSS AND NET OUTLAYS FOR PRODUCERS' DURABLE EQUIPMENT
(By decades, 1869-1938)²¹

Decade	Billions of 1929 dollars, average annual rate			Percentage of gross national product		
	Gross outlays	Replace- ment	Net expansion	Gross outlays	Replace- ment	Net expansion
1869-78	0.48	0.27	0.20	4.6	2.7	1.9
1879-88	1.03	.58	.45	5.3	3.0	2.3
1889-98	1.42	1.03	.40	5.3	3.8	1.5
1899-1908	2.58	1.54	1.04	6.2	3.7	2.5
1909-18	3.88	2.52	1.36	7.0	4.5	2.4
1919-28	5.48	3.88	1.60	7.0	5.0	2.0
1929-38	4.77	4.47	.30	5.9	5.5	.4

The best available studies indicate that to attain the levels of employment and output we hope to reach, we shall need substantial increases in the output of such basic commodities as steel, petroleum products, coke, and electricity. For these industries, the needed increases during the next ten years range from 20 to 50 per cent. Though such studies make no claim to precision, the only reasonable expectation is that continued high-level production will require large increases of capacity in the industries mentioned and in many others.

Chart 12²² gives the historical perspective of expansion of capacity relative to output in several important industries. The tightness of present capacity is apparent. Potential stringencies are even greater than might appear from the chart. For example, if either freight cars or steel were more plentiful, demand for many other commodities would increase, disclosing further deficiencies in capacity. In fact, there are some industries where present capacity is inadequate for current output, providing less elbow room than management considers desirable for continuously efficient operation, satisfactory servicing of the market, and emergencies. Dependable reserve capacity of electric power generating facilities, for example, is normally at least 15 per cent of peak load for any system. Near the end of 1947, it dropped to below 1 per cent for the United States as a whole; in most areas no reserve capacity was available and in some areas acute shortages exist.

The needed capacities for various industries are related. There is no point in having capacity to make more automobiles unless we have capacity to supply steel and other materials. The output of steel is limited by supplies of coke, scrap, steel furnace capacity, blast furnace capacity, finishing capacity, and rail transportation.

²¹ From Simon Kuznets: *National Product Since 1869* (National Bureau of Economic Research, New York, 1946).

²² Omitted.

The same principle applies to the development of raw-material-producing and raw-material-consuming industries. There is a serious question, in particular, whether our capacity to produce fuels and energy is being expanded fast enough to meet the fuel and energy demands indicated by expansion in other lines.

If the whole level of output is to rise steadily and rapidly with minimum waste of capacity, the balancing of expansion in different industries calls for considerably more thorough study than it has been given in the past.

(b) *Modernization of facilities.* The amount of business capital required is only partly measured in terms of scaling up capacity to meet enlarged demands. As the table above indicates, a large and increasing share of outlays for business equipment is devoted to replacement. The rate at which this renewal and improvement proceeds is set not so much by physical wear and tear as by the profitability of setting up facilities of new types, or for new kinds of products, or at new locations. Industrial equipment and structures are often obsolete long before they are worn out.

In deciding upon replacement, business has not felt it could afford to substitute new types of equipment for old as rapidly as the pace of technological advance would make possible. This lag was accentuated during the war. As its close the progress of industrial and business technology had accumulated a reservoir of potentially profitable opportunities for modernization. If still more rapid technical advances are made and if prospective production economies justify the costs of accelerated modernization, both business investment and the rate of increase of productivity will exceed past rates.

(c) *Programs and responsibilities.* In a period of far-reaching economic change, an adequate investment program of expansion and modernization taxes the vision and initiative of business management. This is especially true of the long-range planning of business expansion in a manner which preserves proper relationships among the productive capacities of various industries.

In a free enterprise system, business investment rests on profit expectations, which in turn reflect the outlook for consumer spending, costs of production and investment, availability of improved techniques, availability of funds, and the degree of uncertainty and risk involved in gauging these and other factors. The investment "program" is essentially the sum of a great many private programs—privately planned, financed, and executed. Government investment and operation, in special cases such as hydroelectric power and atomic energy development, clearly serve the public interest. More generally, the government can help to develop a favorable climate which will encourage business to adopt adequate investment programs.

As the task of making up obvious war-accumulated deficiencies in productive capacity is completed, and as inflation is reduced, increasing attention will have to be given to fostering favorable conditions for balanced expansion and for aggressive development of new fields of investment. The most essential condition is continued acceptance and determined implementation of the national policy laid down in the Employment Act of 1946. A policy of sustained maximum production requires that the actions of business, labor, and government be based on broad agreement as to our overall economic goals and on a reasonable degree of assurance that appropriate action will be taken to achieve them...²³

(3) Development of Institutions and Practices for a High-Production Economy

Preceding sections have discussed the means by which our natural resources, our capital equipment, and our human resources may be developed to support a maximum level of well-being. But the ability to produce will not alone assure economic stability and growth. Recurrent periods of recession or depression have led to the realization that maximum resource utilization depends upon many adjustments within our complex economy. It is necessary for us to apply systematic forward thinking to the shaping of our economic institutions and the practices of the men and women whose behavior determines how those institutions will in fact operate.

The problem of progressively improving these institutions, policies, and practices so as to attain balanced growth of the economy divides naturally into four main parts: first, in the industrial area we need price-wage-profit policies which maintain balance between the output of industry and the ability of consumers to buy that output. Second, in the agricultural area, we need balance between city and farm income and between farm and industrial prices. Third, the fiscal policies of the government, such as taxation and debt management, need to be so contrived as to afford maximum incentives to production and to improve the balance within the economic system generally. And fourth, we must strike a wise balance between our internal economic activities and our international trade.

²³ The following sections, which relate to transportation, highways, air transportation, urban redevelopment, housing, development of human resources and productivity (size and composition of the labor force, education for the modern economy, research, good health and productivity, security and productivity, old-age security, public assistance, freedom from discrimination, and fiscal aspects of benefit programs), are omitted here.

[Industrial Price-Wage-Profit Policies]

The national purpose of maximum employment, production, and purchasing power enunciated in the Employment Act of 1946 includes a declaration "to foster and promote free competitive enterprise and the general welfare." Discussion of industrial price-wage-profit policies may therefore quite properly begin with the problem of maintaining a truly competitive system of free enterprise.

(a) *Maintenance of competition.* To operate effectively without a high degree of government intervention, a free enterprise economy must adjust itself to changing conditions through appropriate movements of prices, costs, and production. In a very vital way this depends on the maintenance of fair competitive rivalry among business enterprises. This is recognized in the long-standing policy embodied in the anti-trust laws, the central purpose of which is to prevent monopolistic control of markets, and, in the words of the author of the Sherman Act, to gain for the people the advantage of "the natural competition of increasing production."

Unregulated private monopoly tends to undermine independent enterprises and to create exaggerated extremes of wealth and power within the country. Strong monopoly elements are likely to retard seriously the cost-price-output adjustments necessary to economic stability with full employment. For these reasons, as well as for the other counts against unregulated monopoly, there must be a strong and continuing pressure by the government to keep alive the competitive characteristics of the business system. If this were not to be done, we should have to look forward, first, to a great increase of private monopolistic control of American business, and thereafter, since this would be intolerable, to a great increase in the public regulation of business activity, if not actual public operation in some fields.

In considering the character of competition in the future, it is impossible to ignore the tremendous changes which have occurred in the organization of business control over the past 50 or 60 years. From a situation in which industry was typically organized on a small scale basis, we have arrived at a situation in which there exist corporations of gigantic size. In many industries one, two, three, or four companies control a major fraction of production. In many areas of industry, modern technology requires that firms be of a very considerable size. The best opinion is, however, that the largest enterprises in many industries are larger than is necessary to secure the benefits of technical efficiency. In the future amendment and enforcement of the anti-trust laws, the principle should be followed of checking the further excessive concentration of industrial control and, by protecting the position of smaller competing enterprises, of reversing the past trend toward concentration.

Much of the adaptability of the American economy stems from the initiative and enterprise which give rise to small business concerns throughout the nation. They should have the opportunity to develop and prosper. The existence of the anti-trust laws, although not a sufficient basis for a healthy development of new enterprises, is an essential condition. Beyond this, we must insure that no artificial barriers to their growth exist either through the tax laws or otherwise, and in particular that credit suited and adequate to their needs is made available.

The present degree of concentration of economic power and the existence of other monopolistic elements pose very grave problems. It was in recognition of this fact that the Temporary National Economic Committee was set up in 1938 to engage in a far-reaching inquiry into business organization and practice. The central problems have not been altered by economic changes in the intervening years and it is important that in the light of the findings of the TNEC we move forward to a clear enunciation of public policy and a program of public action.

(b) *The problem of price policies.* The effect upon prices of corporate bigness and collusive monopolistic practices is only one aspect of a much wider pricing problem. Many a business manager fears that the use of price reductions to expand his share of the market will merely results in retaliatory price changes by other firms. Business therefore has sought, as far as possible, to place the competition for markets which it must meet upon some other basis than price competition. The pricing system is thereby deprived of much of the elasticity needed to adjust relative changes in cost and demand.

Moreover, in the effort to realize profits through the ups and downs of business, prices and profit margins are geared to the expectation that full use of capacity is not a normal situation. This means that, in periods of high production, pricing policies and practices are followed that produce a level of profits designed to protect the individual company during future declines in business activity rather than to contribute to the prevention of such declines. Such policies are not conducive to the continued health of the business community because they act on the assumption that it will not continue.

The price mechanism may serve either to promote or to prevent a safe balance among prices, wages, and profits. The greater the success of our free enterprise system in maintaining this balance, the less need there will be for direct governmental intervention in the economic system. This imposes a heavy responsibility upon those business managers whose decisions importantly affect the levels of prices, wages, and profits. Management must recognize that sustained maximum production requires that gains in productivity be passed on through lower prices and better wages to the fullest extent consistent with adequate incentives to business enterprise.

The collective bargaining process to determine wages also plays a vital part in the determination and maintenance of healthy price-wage-profit policies. It cannot fulfill its function if it is used merely as a test of the sheer force which one party or the other can exert in the pursuit of immediate self-interest. Collective bargaining must be based upon a better understanding of the long-range interests of management and labor in the context of the interests of the whole economy.

The greatest opportunity for bringing about economic betterment lies in achieving and maintaining a proper balance among prices, wages, and profits. One of the purposes of the Employment Act is to provide a new climate for pricing policies. The act contemplates that the combined resources of business, labor, agriculture, and the government will be used to do away with business fluctuations of the violence known in the past. To determine what price and wage policies and practices are appropriate to this objective, a re-examination of the problem is necessary.

Therefore, I have instructed the Council of Economic Advisers to continue its work on this problem with the assistance of representatives of all groups concerned. The results of such a study should contribute to the development of sound legislative proposals. But its most important outcome should be a wider and deeper understanding on the part of the government, business, labor, and consumer groups as to the price, wage, and production policies and practices which will contribute most fully to the maintenance of high levels of consumption and investment.

(c) *Markets and income distribution.* During the post-war period, our economic balance has thus far been maintained in the sense that we are still operating at maximum levels of employment and very high levels of production. But the situation is precarious to the extent that the balance cannot be maintained indefinitely without changes in the current pattern of economic relationships.

The Nation's Economic Budget, in constant dollars, for 1939 and 1947 (See table, p. 124) indicates changes in the relationships of the major components of the economy. At the present time, an unusually large proportion of the market demand for goods and services results from business investments, net exports, and government outlays. These have attained a level relatively higher than consumer expenditures, compared with the pre-war period. In terms of 1947 prices, annual expenditures for producers' durable equipment have increased by 170 per cent, while annual consumers' expenditures have increased by only 48 per cent above the pre-war level.

We cannot regard the relationship between capital formation and consumption either in 1939 or in 1947 as a model for the future. Domestic capital formation in 1939 was not sufficient. On the other hand, we are now in the stage where the improvement and modernization of

our national productive plant has a high priority claim on our resources. Nonetheless, after the most urgent deficiencies in our national plant have been overcome, and the extraordinary export surplus has been reduced, a very substantial increase, both absolute and relative, in individual consumption will be possible and necessary. Without this substantial increase in the general standard of living, we would not be able to sustain an expanding economy of full resource utilization.

The increases in consumer incomes and expenditures which have taken place over the last decade are the result not only of the general increase in national income, but also of significant changes in income distribution. Earlier in this Report, estimates are presented which show the trend toward better distribution of family incomes. This trend needs to be continued if ready and constant markets are to be available for a potential increase of 35 per cent in total output of goods and services within a decade. The trend should be continued also because there are still millions of families whose incomes are too low to provide a decent standard of living. A substantial part of our increasing productivity should be devoted to the betterment of these families.

An increase in full-time employment and in the number of employed persons per family were important elements contributing to creating equality of income during the past decade. But with maximum employment now virtually achieved, further increase in these factors can no longer be expected. Already, recent trends in the real incomes of individuals and families indicate that we are losing some of the gains registered before price inflation gained momentum in the middle of 1946. This price inflation presents in a new and aggravated form the old and unsolved problem of assuring continuous maximum production by maintaining the maximum real purchasing power which must go with it without relying too long upon the depletion of savings, extraordinary use of credit, and an abnormal export surplus.

Our central problem is to make gradual readjustments so that the conditions for permanent stability are reached without generating a recession of employment and business activity in the process.

[Agricultural and Food Policies]

(a) *The new farm problem.* For two full decades after World War I congressional and executive policy was dominated by "surpluses" and low prices for farm products. The trends in our economy since the start of World War II have changed basic conditions so markedly that the farm problem of today is not to dispose of surpluses but to get enough production to prevent inflated prices.

If we succeed in our efforts to maintain industrial stability, we can look forward to many years of large markets and agricultural prosperity. Farmers have a large stake in this endeavor. The farm problem today

and in the foreseeable future should be stated in terms of a maximum production economy. Farm policies should aim at continuing expansion.

To achieve stabilized farm prosperity, there will need to be changes in the traditional patterns of farm production. Increased efficiency will be required to enlarge the total production of a farming industry which cannot be materially increased in acreage. The depletion of our soil resources during the war years calls urgently for the extension of conservation programs.

(b) *Needed levels of farm production.* The greatly increased demand for food on the part of our civilian population was a remarkable feature of our wartime economy. This profound change in eating habits, founded upon higher and better-distributed national income, has continued since VJ-day. In 1947, per capita food consumption was about 17 per cent above the 1935-39 average. Among the items increasing more than the average were chickens and turkeys, 33 per cent; eggs, 28 per cent; meats, 24 per cent; and fluid milk and cream, 18 per cent.

In view of the growing population and expanding income, we should seek within a decade to raise agricultural production about 10 per cent above present levels. This would mean that crop production would be about 25 per cent, and livestock production nearly 50 per cent, above pre-war levels.

(c) *Increasing farm productivity.* Achievement of the high objectives set for agriculture will require efficient use of resources. This means increasing emphasis upon research and education to improve technology. It will necessitate an increased capital investment per worker, to raise the individual's productivity about 50 per cent above the pre-war level. It will also mean using two or three times as much fertilizer as before the war, about three times as many tractors on farms, and more of other types of machinery and equipment.

There are still tremendous variations in the efficiency of farm manpower use. Many farms are well organized. But some 2 or 3 million are too small or have poor land or have inadequate buildings and equipment. There is need to increase the efficiency of labor on such farms, and to help some farmers and farm laborers find other, more profitable, employment. More adequate educational and financial aids should be provided for this purpose.

(d) *Security for agriculture and the farm market.* Both farmers and consumers should be protected from the feast-and-famine cycle that the vagaries of nature impose from time to time on farm production. Technological progress will reduce this problem, but there will be continuing need for crop insurance and for storage programs for staples and marketing programs for perishables. Orderly marketing and the widest

possible distribution of bumper crops call for educational and service work with industry and consumers in moving large supplies.

Great opportunities exist for further advances in marketing farm products through intensified research and through educational and service programs. From the farmer's standpoint, marketing improvements mean wider outlets and more adequate returns for his product. From the consumer's standpoint they mean both savings in costs of these products and better, more adequate, and more conveniently available supplies.

Commodity price supports are desirable as assurances against special dislocations which might arise in case of recession. I emphasize, however, the need for keeping support levels flexible. I am glad to note the effort currently being made by various groups, outside as well as inside the government, to modernize and improve the parity formula.

I also realize the stake of many American farmers in maintaining a stable and satisfactory foreign market. Our farmers should continue to export substantial quantities of wheat, cotton, tobacco, rice, and fruit. Though export demands, especially for grain, are now at a high level, some of our more difficult long-term problems are in the foreign trade field.

(*e*) *Interdependence of farm and city.* Maintaining an expanding demand for farm products depends not only on maximum employment for the whole economy, but also upon raising the incomes and living standards of those portions of the urban population who have suffered from excessively low incomes even in times of prosperity.

So long as 13 per cent of our total families have incomes under \$1,000 a year, and 28 per cent have incomes under \$2,000 a year, the dietary standards of these low-income families cannot comport with the true meaning of maximum production for agriculture. Studies made in 1941 indicated that the families and single individuals having incomes of \$2,000 or more—enough to satisfy their food wants fairly liberally at the price level then prevailing—bought 60 per cent more fruit, 25 per cent more vegetables and meats and milk, and 10 per cent more eggs than the average for the population as a whole. This means that minimum wage and other programs designed to encourage a better income balance throughout the wage-earning population should be regarded by the farm population as serving their interests also. The farmer is a prime beneficiary of well-distributed prosperity.

High and stable levels of food consumption are essential to a prosperous agriculture. When demand is high there is little need for direct price supports. Programs to maintain food consumption can go far to prevent economic recessions, to maintain good markets for farmers, and to safeguard the diets and health of the public. Our agricultural and food program should therefore give increased emphasis to measures

designed to protect the diets of such groups as school children and low-income families.

Just as the farmer sells to the city and depends upon urban prosperity, so also the products of industry are sold to farmers in larger quantities when there is farm prosperity.

The relatively low income of farmers before the war was proverbial. Its effects on the demand for industrial products are equally striking. This is shown in the following figures comparing per capita net income from farming of farm people with what they bought, in three significant years:

Farm income, per capita: 1929—\$223; 1933—\$90; 1947—about \$725.

Farm implement sales: 1929—519 million dollars; 1933—177 million dollars; 1947—around 850 million dollars.

Mail-order sales: 1929—447 million dollars; 1933—220 million dollars; 1947—over 1,100 million dollars.

Feed and farm supply store sales: 1929—1,119 million dollars; 1933—463 million dollars; 1947—nearly 3 billion dollars.

Despite recent gains, the purchasing power of many farmers is low compared with that of nonfarm people. The average per capita income of farm people derived from all sources was \$779 in 1946, while the income of nonfarm people was \$1,288. This low average for farm people reflects, not low farm prices—prices were high—but the low productivity of many farmers.

The more widespread enjoyment of satisfactory incomes in farm areas will provide enormous new outlets for industrial products. As recently as 1945, only 58 per cent of all rural homes had refrigerators or ice boxes; only 46 per cent had electric irons, and only 28 per cent had running water. Since then, the installation of these conveniences in farm homes has given businessmen and wage earners some conception of the large stake they have in the maintenance of farm prosperity and its extension to an ever-increasing number of farm families. Electrification, particularly, is providing for farmers a vast range of labor-saving equipment and living conveniences and is creating an increasing market for industrial products.

Our economy is indivisible. Maximum production and purchasing power in the city and on the farm are inseparably connected. As shown by the relative instability and inadequacy of farm income in the past, and the impact of this upon the whole economy, the economic future of the country as a whole will require concentration upon those policies which will enable the farm population to share equitably in economic growth and in the improvement of living standards.

[Taxation and Debt Management]

(a) *Taxation.* The first feature of our long-range tax policy must be the maintenance of tax revenue which, except in years of depression, will balance the federal budget and provide a substantial surplus for debt retirement.

It is a remarkable feature of the post-war period that there has been so little fear of the effects upon the national credit or upon the national well-being of a public debt ten times as large as the debt which a dozen years ago was causing much uneasiness in the financial world. But although we have learned that an enormous public debt is not necessarily ruinous to public credit nor destructive of national prosperity, we should never forget that within it is a sleeping danger. If less propitious conditions arise within the economy, the public debt may indeed be found a serious burden upon the process of readjustment. Every consideration of prudence with respect to future problems of the national economy and of the national credit in critical circumstances requires a firm and sustained policy of reducing the public debt.

The second requirement of our long-range tax policy is that the tax rates and the character of the taxes be such as to help sustain prosperity. This cannot be done by a tax structure that remains the same regardless of changing economic circumstances. Lowering particular taxes on business may at one time be needed as a means of stimulating business expenditures when they are inclined to lag, but maintaining or advancing taxes at another time may be needed as a means of checking over-expansion or over-capitalization. These adaptations can be made without the injection of uncertainties into businessmen's calculations greater than those they are already accustomed to deal with. Similarly, the abatement of taxes on consumers or certain classes of consumers may at one time be important as a means of supporting their purchasing power, whereas at another time the maintenance or increase of taxes may be the most effective means of damping an inflationary tendency.

There is an obvious conflict between the desire of consumers to have taxes upon their incomes reduced and the desire of business to be relieved of taxes which figure in operating costs or which lessen the funds that they have for re-investment and business expansion or that large income receivers have available to invest as equity capital. This conflict of private interests must, in the consideration of tax policy, be resolved by the Congress through adjustments which will promote the most prosperous and stable economy. There is no formula by which the best distribution of the tax burden can be determined. However, the lessons of wartime and early post-war experience seem to indicate that for the sustaining of an economy of maximum production and a market com-

mensurate with this rate of production, more concern will need to be directed during the years just ahead towards easing the tax burden on the consumer than toward accelerating the rate of capital formation.

(*b*) *Debts management.* The vast increase in the public debt has not created the difficulties that many people feared, partly because our national debt is owned by our own citizens, and partly because of the technical skill with which the debt has been managed jointly by the Treasury Department and the Federal Reserve System.

A most important part of our debt-management policy has been the program to support the market for government securities. During the war period, when it was vitally necessary to maintain a market which would absorb vast issues of securities at low interest rates, the Federal Reserve stabilized the market through its open market operations in buying and selling short-term government securities at low rates of interest. Now that it is no longer necessary for the government to increase its debt, short-term interest rates have been permitted to rise. A decline has also been permitted in prices of bonds from the premium prices to which they had risen as a result of market demands in the early post-war period. No bonds, however, have been permitted to fall below par and it is the declared purpose to continue active support of government bonds for the purpose of maintaining an orderly and stable market at a low level of long-term interest rates.

The established policy of supporting the market for government securities makes it possible for banks to obtain additional reserves, on the basis of which to expand credit, by selling part of their large holdings of securities to the Federal Reserve. This policy, therefore, does not permit the Federal Reserve to make effective use of the traditional method of limiting inflationary movements in the economy by requiring banks to borrow in order to obtain additional reserves and by raising the discount rate charged on such borrowings. The result of such a policy would be an increase in general interest rates. If the rate of interest upon other investments rose, they would become more attractive than government bonds, both to banks and to other investment holders, who would call upon the Federal Reserve banks to buy bonds. Any purchases by the Reserve System would offset the effects of the restrictive discount rate policy.

In the recent congressional hearings there have been proposals to solve this dilemma by abandoning the support policy and freeing the Federal Reserve banks to bring about an anti-inflationary contraction of credit by increasing the discount rate, as was done in 1920. No such change in policy should be considered. The financial world should rest easy that the investment market will not be subjected to the demoralization which swept over it in 1920 when the unsupported market for government bonds fell about 20 per cent below par.

Affirmation of a policy of supporting the government bond market as a continuing program of the government requires the use of other and less dangerous methods to restrain inflationary bank credit. Voluntary but effective restraint by the banks of inflationary bank credit expansion may prove adequate to the problem. If it does not, more direct action by the Federal Reserve banks will be required. Such actions as may be taken will not involve withdrawing support from the government bond market.

[International Economic Relations]

The far-reaching effects of World War II upon the use of economic resources and upon the trade and business relations between nations will be felt for many years. The enormous destruction of the physical and organizational basis of production spread over most of Europe and parts of Asia, while elsewhere many new industries were developed and old ones stimulated. In the reconstruction process many alterations in the patterns of economic organization and trade relations are taking place. Great Britain is engaged in a difficult task of industrial and trade rehabilitation, while two other former leading industrial nations, Germany and Japan, are now thrust into minor roles.

The relative importance of the United States in the world economy has been greatly enhanced, partly because some of the older great nations have suffered adversity, but primarily because of our own increase in production. Although other nations fortunately possess most of the resources which they need for reconstruction, certain critical resources, such as food and machinery, which are needed to revitalize their productive energies, can be supplemented only by supplies from the United States and other countries of the Western Hemisphere. The program which I have asked Congress to authorize in order to assist European recovery over the next four years may make the difference between success and failure of world reconstruction.

The changing economic position of the other industrial nations is of great significance. During the war and its aftermath, many areas that formerly looked to these nations for industrial products have become intent upon their own industrial development. They cannot secure supplies sufficient to meet their increased requirements for capital goods from their traditional trade sources, and they are beckoning increasingly to American machine makers, to American capital, and to American skill in management and production.

A development which we cannot yet evaluate is the growth of the policy of state control of foreign trade in many countries. Because of critical shortages throughout the world there has been little relaxation of the wartime controls over exports, imports, and foreign exchange, and the course of action in some countries indicates a purpose to continue

these controls. Our experience, however, shows that the difficulties of trade between a nation with state control and a nation with free enterprise can be surmounted and they can be expected to diminish as goods become more readily available in world markets.

Other developments bound to affect the course of trade are the occupation of Germany and Japan and the emergence of several new independent and self-governing states.

Against this background of new developments we can place the more familiar consideration of our own requirements. For some commodities we must have foreign markets or undertake a serious task of shifting our resources. A substantial part of agricultural and industrial employment is in production for export. On the other hand, our need for imports, especially of raw materials, will increase, notwithstanding our progress in the production of substitutes for such materials as natural rubber and silk, two of our most important pre-war imports. The great enlargement in national production which has been portrayed in this Report requires a corresponding increase in those raw materials which come from abroad and in many other goods and services supplied by foreign countries. The heavy drain of war production upon our own natural resources must be remedied by a conservation policy supported by heavier imports, and the national security must be fortified by stockpiles of strategic materials which we do not produce at home.

Undeterred by the uncertainties arising from new political and economic conditions, this government has been striving consistently to promote recovery and reconstruction efforts which would eventually contribute to mutually profitable and harmonious international economic relations. In addition to relief and reconstruction aid, we have supported within the framework of the United Nations a series of international organizations, such as the International Bank for Reconstruction and Development, the International Monetary Fund, and the Food and Agriculture Organization, to cope with the different categories of economic problems. The vast effort is now well advanced and many of these international organizations are already operating.

Still in process of creation is the International Trade Organization. The draft charter of this organization lays down a code of fair play in the international trade field. Nondiscriminatory and multilateral trade unhampered by high barriers, is the central aim of the proposed organization.

A major step toward this long-range goal is the General Agreement on Tariffs and Trade, recently concluded between ourselves and 22 other countries. This agreement reduces or eliminates preferences affecting a large part of our trade with the British Commonwealth. It provides for reductions of many tariffs and the maintenance of a low rate or free entry on other products. These concessions are protected by provisions

designed to prevent participating countries from resorting to alternative means of restriction or discrimination. Like the proposed charter of the International Trade Organization, this agreement will help establish conditions under which world trade can flourish in less troubled times and under which the present reconstruction efforts can be carried forward.

The recovery of foreign production and ability to export, our own high demand for imports, and the international agreements to reduce obstacles to trade may be expected to help other countries buy our products in the future without depending upon the extraordinary financial assistance that is now required. Nevertheless, it is natural and desirable that we maintain some surplus of export in the years ahead by the steady investment abroad of private capital. It is desirable both from our point of view and that of other countries that we, a country rich in capital, make some of our savings available to areas where capital is needed and where properly safeguarded private investments can earn a good return.

(4) The Timing of Economic Programs to Promote Stabilization

While it is most urgent now that we combat inflationary dangers, we cannot wait until the tide turns before considering affirmative measures that will be needed in the future. Economic conditions may turn rapidly, but the formulation, enactment, and initiation of economic and fiscal programs require a considerable amount of time. Prudence demands that we look ahead and prepare for tomorrow while we act for today.

In timing the adoption of measures for long-run prosperity we must give careful consideration to the following principles:

(a) Certain programs related to national security and foreign policy, to promotion of urgently needed production, and to protection of our natural and human resources against serious economic hazards must go ahead even though government outlays for foreign or domestic programs contribute to the necessity of anti-inflationary measures.

(b) Certain adjustments, such as the increase in minimum wages and tax adjustments, are needed in order to mitigate the hardship imposed on those who are the hardest-hit victims of the inflationary price rise.

(c) Major parts of the proposed expansion in the social security program will be deflationary in the first period after inauguration. Therefore, there is no reason to postpone the adoption of these urgently needed measures.

(d) Federal, state, and local public works in general should still be deferred wherever feasible. We need, however, certain initial steps im-

mediately to prepare these measures for future years. For instance, the federal government and state and local governments should be preparing drawings and specifications for public-works projects to be undertaken when needed. In my budget for the fiscal year 1949, I have included appropriation requests and estimated expenditures in amounts sufficient for the initial steps of new public works.

(c) When the inflationary pressure subsides, we should speed up the programs of resource development, transportation, and urban rehabilitation, and further expand the social security, health, and education programs.

Since our first experience with the Employment Act is occurring under conditions that give priority to measures needed to counteract inflation, we are given time to consider carefully the measures that will aid in meeting the threat of unemployment at some time in the future. But we must not fritter away the time thus granted us. We must not be complacent and believe that the job of employment stabilization has been solved. A boom carries in it the seeds of its own destruction. We must be prepared to act in time if we want to make good our promise and prove to the world as well as ourselves that an economic system of free institutions can be made to work steadily as well as efficiently.

The Economic Report of the President, January, 1949: Guides ²⁴

As we turn from consideration of the facts of our economic situation to a program of action, there are several broad principles which I believe should guide us. These principles should help us to keep clearly in mind where we want to go and how certain roads rather than others are the surest and quickest way of getting there.

First. We should remember that the goal we seek is the greatest prosperity for the whole country and not the special gain of any particular group. That is why the Employment Act of 1946 calls upon the President to present an economic program aimed at continuous "maximum employment, production, and purchasing power." I firmly believe that this goal is attainable.

Maximum employment for 1949 means that nearly 1 million additional job opportunities should be provided for the growing labor force. Maximum production means that our increased labor force and modernized plant should strive for a 3 to 4 percent increase in total output. Maximum purchasing power means that the sum total of market demand by government, business, and consumers, domestic and foreign, should be proportionate to our productive capacity. It must not be more or we

²⁴ *The Economic Report of the President to the Congress*, January 7, 1949, pp. 8-9.

shall suffer inflation. It must not be less or we shall suffer unemployment and underutilization of our resources.

Second. We should think and work with a reasonably long look ahead, not keeping our eyes just on the problems of the moment. Our immediate tasks must be placed in the perspective of our long-range national objectives. While we must deal promptly with the problem of inflation, we must not unduly hold back undertakings that are needed to preserve and develop our employment opportunities and our productivity in later years. Policies needed to develop our resources and to prevent depression in the long run must be reconciled with policies needed to curb inflation in the short run.

We must pursue affirmative programs for housing and health, for education and resource development. Yet the fight against inflation prevents us from undertaking these long-range programs with the speed and on a scale that would otherwise be desirable. In the recommendations made in this Economic Report and in the Budget which will be transmitted to the Congress in a few days, I have sought to reconcile these objectives in a way that strikes the safest balance.

Third. In order to have a yardstick for appraising strength and weaknesses in our economy and the adequacy of Government programs, we need concrete objectives for economic growth, and particularly standards for a better balance between production and consumption, income and investment, and prices, profits, and wages which will be conducive to sustained economic progress. In the Annual Economic Review of the Council of Economic Advisers, transmitted herewith, there is a detailed treatment of our growth possibilities over the next few years. This shows how our employment, our output, and our standards of living can rise if we encourage and place major reliance upon our free enterprise system, conserve and develop our natural and human resources, retain our faith in responsible Government, and do not relax our efforts.

This study by the Council of Economic Advisers shows that action is now needed on the long range programs which I set forth in the concluding section of this Economic Report.

Fourth. We are dedicated to the principle that economic stability and economic justice are compatible ends. The fact that our total purchasing power is now at record levels cannot blind us to the equally important fact that the incomes of many people have not risen apace with the cost of living and that they have become the victims of inflation. A prosperity that is so uneven in the distribution of its fruits cannot last.

Fifth. We must fulfil the requirements of our essential programs—national defense, international reconstruction, and domestic improvements and welfare—even if doing so may require the temporary exercise of selective controls in our economy. We want the greatest amount of economic freedom that is consistent with the security and welfare of the

people; but we do not want to sacrifice that security and welfare because of narrow and selfish concepts as to the acceptable limits of government action. If we could have the amount of national defense that we need, make the contribution to international reconstruction to which we are committed, and at the same time maintain and expand our standards of living now and in the future without any kind of selective controls over the economy, that would be most highly desirable. And it is possible that we may not, in fact, be forced to use such controls. But we would rather have these relatively unpleasant restrictions on our freedom of action for a while than imperil our security or allow our human and material resources to deteriorate.

Sixth. The vigorous commitment by the Government to an anti-inflation policy should not obscure the fact that the Government is equally committed to an anti-depression policy. In fact, curbing inflation is the first step toward preventing depression. And in times like the present, when the economic situation has mixed elements, the Government needs both anti-inflationary weapons and anti-deflationary weapons so that it will be ready for either contingency. It may even be necessary to employ both types of measures concurrently in some combination, for some prices or incomes could rise too rapidly while others could be falling dangerously. The same dictates of prudent policy which call for higher taxes in a period of inflation would call for tax adjustments designed to counteract any serious recessionary movement.

Goals and Means of Approaching Them in 1949 ²⁵

BASIC ECONOMIC OBJECTIVES

The Employment Act of 1946 stated the needs of our economy admirably when it set the objectives of "maximum employment, production, and purchasing power." In terms of these objectives, the immediate tasks that loom largest in 1949 may conveniently be stated.

Maximum employment

It is estimated that the labor force will increase by nearly one million during 1949. This increase will reflect not only the increase in the population of working age but also the large number of students under the GI program who will complete their training and education. The civilian employment goal for 1949 should include provision of useful work opportunities for the net increase in the labor force. Maximum employment means steady work at customary hours, not work sharing. While

²⁵ *Ibid.*, *The Annual Economic Report of the Council of Economic Advisors*, pp. 36, 38—40.

some temporary frictional unemployment is inevitable in a fluid economy, its volume should be kept as near as possible to the present low level.

Maximum production

An increase in the total production of goods and services of 3 to 4 percent, or 8 to 10 billion dollars measured in 1948 prices, should be regarded as a reasonable objective for this year. In agriculture, the improvement in plant and the abundance of last year's feed crops promise a continued high total output with an increase in livestock products which would somewhat improve consumption standards for our people. On the industrial side, about 50 billion dollars have been invested in expansion and modernization since the end of the war. Hence the slight increase in output per man-hour which occurred last year should be enlarged upon this year. In spite of these improvements in industrial productivity, there will still be several bottlenecks where there are persistent shortages of capacity for producing electric power and critical materials, particularly certain metals. Industry and government should press their efforts to overcome these shortages.

Maximum purchasing power

The basic concept underlying "maximum purchasing power" is that the income generated by productive effort should flow to groups and individuals throughout the economy in a manner that will provide adequate funds and incentives for maximum production in the factory and on the farm, and furnish buying power to consumers and business sufficient to take promptly off the market the goods available for their use. Broadly conceived, it requires the balanced allocation of resources and manpower in accord with the interests of the economy as a whole. These interests must include support for basic national policies such as national defense and welfare.

Since prices and wages are the main mediums through which purchasing power is distributed, price and wage movements and relationships decisively affect the outlook for stable prosperity. Most economic policies are directed in one way or another toward this problem of balanced purchasing power in order to bring the pattern of production and consumption into better alignment so as to attain economic stability at the highest feasible levels. In addition to price and wage adjustments, there is need for a proper balance between total money purchasing power and the supply of goods if inflation or deflation are to be avoided.

The goal for 1949 should be to make as much progress as we can within one year toward achieving adjustments which will maintain purchasing power on a stable basis.

NEEDED ADJUSTMENTS

Fulfillment of our 1949 goals for maximum employment, production, and purchasing power will not come by chance. It will require wise economic adjustments, toward which some progress was made during 1948. Yet much remains to be done. There are seven areas of adjustment which seem to us of signal importance.

Fiscal policy

The large excess of cash revenues over expenditures, running at an annual rate of more than 12 billion dollars in the first half of last year, was the main bulwark of our anti-inflationary policy. The review of Government transactions in Part I indicates that this surplus will disappear and change into a deficit unless new tax legislation is adopted. It is well-nigh axiomatic that the Government should operate at a substantial surplus during a period of unparalleled prosperity when inflationary pressures persist. This is essential not only to deal sensibly with the current situation, but also to permit fiscal policy to be reversed if recessionary trends should later develop which might call both for tax reductions to stimulate business and markets and for additional public expenditure.

On general economic grounds, tax measures should be devised to result in an increase of at least 4 billion dollars. However, the range of prime considerations in matters of tax policy extends so far beyond purely economic analysis that ultimate decisions must be made within that wider perspective.

In formulating a tax program for 1949, the following principles seem paramount: The additional tax measures should (a) provide a budgetary surplus; (b) absorb some of the high current profits, while avoiding tax measures which would lead business firms to charge higher prices or impair their ability to maintain desirable rates of expansion; (c) guard against aggravating any recessionary tendencies and provide sufficient fiscal flexibility to enable quick readjustments if such tendencies should become strong; (d) reduce the inequities of previous legislation and strengthen the enforcement of the tax-collecting system.

Clearly there are various combinations of tax measures that would be consistent with the foregoing principles. One workable combination would include a tax on corporate profits, and some increase in the tax on personal incomes, estates, and gifts. Consideration should also be given to reductions or abandonment of some excise taxes and increases of others. These revenue measures should have priority over any technical improvement of the tax system in general, although exceptions should be made for the most urgently needed revisions.

With respect to taxes on corporate profits, there are some arguments for an excess-profits tax and others for an increase in the regular corporate tax rates. The excess-profits tax has these advantages: It is sensitive to changes in business conditions, and therefore will rapidly reduce its demands on taxpayers in the event of a recession; it is difficult to shift to the consumer; it reduces incentives to increase prices; it may reduce the pressure for increases in wages of a kind that would be inflationary. An increase in regular corporation rates has certain advantages, provided the increase is moderate; it has administrative simplicity; it avoids the high marginal rate that would exist in some concerns under an excess-profits tax and that might lead to a relaxation of managerial efficiency; it avoids some of the inequities which might result under the excess-profits tax. In any event, the noneconomic elements involved in the choice between these two types of taxes or in a combination of the two make it clear that the decision should rest on the broadest grounds of policy.

Under present conditions increases in the tax on personal incomes should be limited to the middle and upper brackets, primarily on grounds of equity. However, a further substantial increase in defense and military aid budgets would call for an increase in personal income taxes in all brackets.

With respect to estate and gift taxes, these taxes can be more easily administered than an income tax with very high marginal rates, and such taxes have the minimum adverse economic effects.

Cash receipts could be increased further by advancing the date of the statutory increase in pay-roll taxes. Early expansion in the social security program would strengthen anti-inflationary factors now and provide for additional purchasing power cushions later.

Basic Objectives for Balanced Economic Growth²⁶

During the nineteen thirties the country fell into a tremendous underuse of its productive resources. This led to a dominating fear of surpluses in capacities and in goods. The real problem, however, was how to restore full use of our productive resources and initiate a further process of growth. During the war years, full employment and phenomenal levels of production were achieved, but there remained doubts in the minds of many whether we would be able to maintain full and effective use of our resources after the return of peace.

The Employment Act of 1946 is based on the conviction that our economic system can sustain high and steady levels of employment and production. But such an outcome is not automatic. It will be achieved

²⁶ *Ibid.*, pp. 50-3, 55, 61-3.

only if business, workers, farmers, and the Government are guided less by the record of the past than by the possibilities of the future. The Employment Act therefore calls for estimates of the levels of employment, production, and purchasing power needed to accomplish the purposes of the law.

This part of our report continues the effort begun last year to formulate needed levels for the American economy in a somewhat longer perspective than that of Parts I and II, which deal with conditions in 1948 and adjustments for 1949.

Such a formulation does not substitute distant dreaming for immediate practical action. It simply recognizes that the decisions affecting the whole economy which we make from year to year will be more intelligent if we take a longer look ahead. The intent is to keep our objectives responsive to current experience by reviewing them annually. The aid of experts in business, labor, and agriculture, and in Government and independent research has been sought. Success in the venture of defining common objectives should promote success in the task of furthering cooperative action in the solution of common problems.

Such economic objectives are not to be confused with economic blueprints or plans used in regulated economies. They are conceived simply as bench marks for the orientation of private enterprise and public policies. Nor are they forecasts of what would be likely to happen without special effort. They depend upon success in accomplishing the objectives of the Employment Act. We present them as an attempt to integrate governmental and private thinking in a way that is essential for making rational decisions.

In formulating these economic objectives, the future of our foreign relations is now the major uncertainty. However, even at present levels of the defense budget and international aid, we are able to make some progress toward peacetime objectives. This year, for example, will see further additions to plant and equipment and a further improvement in the standard of living. A deterioration in the international outlook, bringing the necessity for greatly increased defense programs at home and military aid abroad, would reverse the situation. But an assumption underlying the economic objectives now presented is a gradual improvement in international affairs.

Between the decade beginning in 1869 (earliest available estimates) and the decade ending in 1918, the gross output of the economy doubled about every 20 years. This is shown in the preceding chart. Omitted—Ed.

From 1919 to 1929, a very high rate of expansion resulted in an increase of 33 percent. In the next 10-year period, including the Great Depression, but little gain was registered. A visitor from Mars looking at the national production chart would have imagined that one-quarter of the arable land had been destroyed by a flood, over one-quarter of the

population wiped out by plague, and one-quarter of the industrial plants destroyed by earthquake. From 1939 to 1948, including the war years, the increase in output was resumed and a rise of more than 50 percent was accomplished. Thus, from 1919 to 1948 the output of the economy again doubled.

In addition to the increase in output, the number of leisure hours has risen substantially. In the last century, the hours worked were frequently as high as 70 or more per week. In manufacturing industries, the average weekly hours of work have dropped more than 20 percent since 1909.

PRODUCTION AND INVESTMENT OBJECTIVES

A reasonable development for the next few years would be an annual increase in output of about 3 percent. This target depends upon several factors, chief among them being the growth in the labor force, the length of the average work-week, and the output per man-hour.

It is estimated that our population will increase less than 1 percent annually over the next decade, compared with about 2 per cent in the period 1870 to 1919. Since the proportion of the population within age brackets seeking work will increase slightly more, the increase in the labor force is estimated at about 1 percent a year. This increase allows for about a million and a half net immigration over the next 10 years. It assumes that expanded social security legislation will enable more old people to retire somewhat earlier. Young people may enjoy longer education but will engage in considerable summer and part-time work.

Although average hours worked per week are now at a level consistent with health and reasonable leisure, some reduction in annual working time would result from continuation of the present trend toward additional holidays and paid vacations. Such reductions would partially offset the increase in the labor force. Under these circumstances, economic growth over the next few years would depend to a considerable extent on the rise in output per man-hour.

As far as conclusions can be derived from deficient statistics, it appears that output per man-hour has increased on the average by nearly 2 percent per year for a half century or more. The rate of increase for manufacturing industries has been about 3 percent. Over the next few years, a productivity increase for the whole economy averaging somewhat more than $2\frac{1}{2}$ percent a year should be possible. This rate of productivity increase is based on the assumption that Government, labor, and management cooperate fully in achieving maximum productive efficiency. To achieve it requires continued large investment in labor-saving plant and equipment, expanded research, and lessening of restrictive practices on the part of both labor and management.

The unprecedentedly heavy investment of the past few years has brought capacity in most lines of business up to a reasonable relationship to current demand. Utilization rates are high, but no longer excessively so in terms of what might be expected under sustained high employment. In a few industries which were greatly expanded during the war, such as aircraft, shipbuilding, and magnesium production, excess capacity prevails. On the other hand, remaining bottlenecks in production of metals and electricity, the transmission of gas, and in transportation indicate areas where we have not caught up and where provisions should be made to restore an adequate reserve margin.

A more difficult question concerns the quality or condition of our present productive facilities. Whether they are now in better or worse condition than at some previous time, they are less modern and less efficient than they could be. The newest and best types of facilities in any industry are superior to the bulk of those in use, and still better types are generally in the offing awaiting development and introduction. This situation is a normal and necessary consequence of the progress of technology and the durability of capital goods. Technology is always in the lead. If technical development were to cease tomorrow, American industry could still go on for many years modernizing its plants up to present attainable standards, with large investment outlays and large gains in efficiency.

OBJECTIVES FOR CONSUMPTION AND LIVING STANDARDS

In an economy of steady growth moving from postwar to peacetime conditions, the output of consumer goods and services should increase not only in absolute amounts but also in ratio to total production. In 1948, consumers were receiving about 70 percent of gross output, compared with 76 percent in 1929 and 75 percent in 1939. Even allowing for the contingency that Government expenditures and net exports may hereafter account for a larger portion of the Nation's Economic Budget than in previous periods of high employment, it is felt that final consumers should absorb at least 75 percent of all goods and services within a few years. Coupling this with the growth of the economy as a whole, the result would increase total consumption per year by about 4 percent and per capita consumption by about 3 percent above present levels.

This higher consumption pattern must be brought about by a substantially equivalent increase in total consumer income. It will require improvements in the distribution of that income not only to avoid areas of want in a land of plenty, but also to avoid higher saving than is necessary to permit the expansion of investment needed for stable growth.

Changes in consumption patterns would flow from these desirable developments. We have already witnessed great strides forward in

standards of consumption of food and other goods, although here the standards of many low-income families leave much to be desired. On a national basis, we have fallen behind in terms of housing accommodations, medical and other health care, and the provisions of educational facilities. Assuming higher and better distributed incomes, and adequate governmental programs, relatively greater increases may be expected in these areas. Increased leisure will presumably result also in more travel and higher recreational expenditures in general.

Periods of high income and employment are also usually associated with a high proportion of expenditures for durable consumer goods. To some extent in the past this has been the result of the fact that in years of depression such purchases have been postponed. Still, there is little doubt that an enormous potential market exists for the durable appliances which have contributed so much to the convenience and comfort of modern life. Services and durable goods may hereafter absorb a higher proportion of consumers' budgets than they did before the war. Nevertheless, there would also be some increase in food consumption, especially in the variety and interest of the diets of lower income groups, and in other types of nondurable consumption. New frontiers will be provided for the development of private initiative by the rise in living standards. The enlargement of many community and governmental services will also be required.

Balancing production and consumption

At present, private capital expenditures are running at 15 percent of the Nation's Economic Budget, reflecting in part the need to make up for wartime and some prewar deficiencies. The shift to more sustainable long-run patterns will require a relative decline to about 11 or 12 percent of the Nation's Economic Budget, though perhaps a moderate increase in absolute amounts. In addition, certain other elements of the Nation's Economic Budget, such as the Government's foreign-aid program and expansion of business inventories, will decline in absolute or relative importance. To some extent, urgently needed domestic programs of the Government will take their place. Nevertheless, to reach sustainable patterns of growth will require that personal consumption increase by considerably more than total output and assume a larger relative share in the Nation's Economic Budget. This means that the general standard of living can and should rise substantially.

In the immediate situation there may appear to be a conflict between the increase in consumption needed to attain long-run objectives, and the actuality of inflationary forces to which largely increased consumer demand would further contribute. The more fundamental danger is that the automatic forces of the market tending to increase consumption are of uncertain and perhaps insufficient strength to bring about needed

changes in the patterns of income and expenditure when the temporary factors in demand decline.

One of the great dangers ahead is that the process of adjusting to these changed patterns will lead us into a depression through failure of consumption to rise sufficiently. But to be forewarned is to be partly, though not wholly, forearmed. Major reliance should be placed upon, and full encouragement given to, those free automatic forces within the economy which bring about adjustments. We must get from privately organized activities as much handling of the Nation's economic problems as they are capable of achieving. But we should be prepared to supplement them when needed through appropriate Government policies directed toward economic balance at the highest feasible levels of activity. In this, we should not neglect the problems of those whose living standards have lagged seriously even during past and present periods of high prosperity.

FROM INFLATION TO STABILITY ²⁷

Stabilization policy for the immediate future is still concerned mainly with restraining inflationary forces, breaking bottlenecks, and selectively adjusting the markets and prices of some commodities. Yet this report has designated some basic longer run maladjustments concealed under cover of the inflationary boom. Since the war, increases in consumption have been limited by the very high demands of business for reconversion and modernization after the war, and by requirements for national defense and foreign aid. Our analysis shows that over the ensuing years consumer income and expenditure should be increased both absolutely and relatively.

The fundamental issue is: Will this increase result automatically through the interplay of prices and costs in the market place? Or will a depression appear when the gap between potential output and effective demand of consumers and business becomes unmanageable as has happened in the past? Or can affirmative policies, as envisaged in the Employment Act, close or bridge this gap before it becomes a chasm?

Fundamental strength of the economy

It is true that the economy today is in much better position to withstand shock than in the twenties. Business has become better informed and more prudent, particularly in its inventory policies. There has been less speculation generally. The so-called "built-in flexibilities," such as the social security system, veterans' programs, and the farm price-support program would all have a cushioning effect in case of a downswing.

²⁷ *Ibid.*, pp. 74-7.

In general, large Government budgets make an economy more resistant to shock, and on the revenue side the progressive income tax increases flexibility. War-created liquid assets, in the hands of business, State and local governments, and individuals could act as an immediate shock absorber even though their real value has been reduced by inflation. Federal deposit insurance would operate against large-scale withdrawals of funds such as occurred during the last depression, and the Reconstruction Finance Corporation could exert some mitigating influence. Finally, with a tight labor market, more bread-winners per family, and more progressive taxation, the distribution of income has improved since the prewar period, although these gains have been halted by inflation.

Vulnerability of the economy

These improvements, however, probably do not outweigh the fact that a very high-level economy, which has been supported by an investment boom and permeated with inflation, is vulnerable to sharp declines. Moreover, in terms of the basic problems of lifting consumption to higher levels in the years ahead, we cannot rely on a simple reversal of the inflationary process with its accompanying lag in consumption. When price weakness becomes widespread, businessmen tend to become pessimistic and often curtail investment and production; consumer purchases are deferred. The stickiness of many prices enhances the shrinking of production as demand falls off. Consumers' real incomes are cut by unemployment more quickly than they gain by price declines. The slack thus develops into a downward spiral.

Preventive measures

More important than the preparation of measures to combat a depression after its advent, are those measures which reduce the likelihood of a serious downturn in the economy by correcting maladjustments in time.

The long-term problem of a shift in the balance between investment and consumption depends for its solution largely upon an improved working of the market mechanism. Adjustments in prices and in wages, or some combination of the two, are the primary tools. In general, these adjustments entail an upward movement of wages relative to prices. But these adjustments require the drawing of some very delicate lines. It is not easy to determine the exact point at which price decreases which increase sales become price decreases which impair business confidence or income and thus reduce production. It is not easy to determine the exact point at which wage increases which add to purchasing power become deflationary because they add too much to costs. It is difficult through the market mechanism alone to solve the problem of timing, to determine just when the shifts in the composition of national income and

spending should be encouraged without being either excessively inflationary or excessively deflationary. Furthermore, these shifts involve the interests of powerful organized groups and also involve competing social priorities or values, so that agreements are frequently not easy to reach.

The problem of inflation is not limited to the peculiar conditions of the "post-war boom." There is a continuing possibility of increases in prices and wages in an economy sustained at high levels of activity. Here lies a problem of long-range wage and price policies that must be solved within the context of general labor-management relations. The important organized groups within the economy, such as business, labor and agriculture, need both the economic analysis and the practical machinery which will enable them better to harmonize their separate interests with the common good and to compose even if not completely agree upon those matters which from a narrower perspective might seem irreconcilable. The work under the Employment Act of 1946, boldly conceived and faithfully exercised, can help to improve the economic analysis and to stimulate the cooperation required for this central aspect of stabilization in a free enterprise democracy.

Experience teaches that Government policies are also necessary. One type of public policy, the expansion of social security programs, is particularly appropriate now because it would strengthen mass purchasing power and markets in the long run, while contributing immediately to the restraint of inflationary pressures. By increasing the coverage and benefits of unemployment and old age insurance, by introducing disability and health insurance, and by providing more adequate public assistance, we would thus contribute towards that reconciliation of immediate and long-run needs which is so difficult to achieve through the market mechanism.

To have the optimum immediate anti-inflationary effect, payroll taxes should be increased by more than the increase in benefit payments. To have the optimum long-range stabilizing effect, the expansion of these programs should not be financed exclusively by payroll taxes. It should draw some support in future years from general budget sources.

A minimum wage realistically adjusted to present price levels also helps to maintain a floor under wage incomes.

Future tax revisions should also take account of the need to strengthen consumer markets, even while they should not neglect the need for stimulating investments, especially in areas which offer both great rewards and heavy risks.

These social security programs, minimum wage laws, and tax revisions are recommended on the ground of social objectives. These same programs, however, have an important economic impact and may help

to maintain or increase the purchasing power of a considerable sector of the people.

Balanced growth. The upward adjustment of consumer incomes relatively to prices will be essential in the future to establish sustainable patterns of balanced economic growth. It is important that these adjustments be made. But we cannot be sure that these adjustments alone will insure an increase in consumption and the maintenance of a high level of activity. Decreases in prices or increases in costs may lead to a recession if they occur at a time when markets are weak and aggregate demand is shrinking. Therefore it is essential that, during threatening times, adequate support be given to demand while fundamental adjustments are going on.

Such support may be provided by stepping up these basic governmental programs which are essential to economic growth. At times it may become necessary to supplement these programs by specific measures to insure stability. Without adjustments in the price-wage-profit relationship, we shall not be able to place the economy on a basis of continuing stability. Without the simultaneous adoption of policies designed to promote economic growth, we may not safely rely on the adjustments. It is necessary to combine measures that promote growth with those that support stability in an integrated program.

We should adapt our policies accordingly. In schools, housing, health and community facilities, resource development and conservation, transportation and other fields, there are enormous discrepancies between the work now being done and the needs of a growing economy. Advance planning on all these fronts should go forward in larger magnitudes than present programs can be pushed. With careful timing, these programs should be stepped up sufficiently so that adjustments in costs, prices and profits can be made on a strong underpinning which prevents adjustments from turning into a downswing.

The United Kingdom and the Dominions

How Much Planning?

THIS chapter deals primarily with the United Kingdom. At the end, however, I have included some excerpts from the Australian White Paper on *Full Employment* and from the Canadian White Paper on *Employment*.

In 1944, the Churchill coalition government issued its White Paper on *Employment Policy*, the main part of which is reproduced here.¹

Except during the transitional period, the government in 1944 would rely primarily on private enterprise. It would assume responsibility for maintaining total expenditures; but government contributions to spending and variations in taxes were not to be the most potent medicines. Rather the government would (1) take action early and prevent a small decline from snowballing into a major depression; (2) accept a limited responsibility for lacing public investment and taxes with private spending; (3) rely primarily on private spending, the time distribution of

¹ Chapter II and parts of Chapter III of the original report are not reprinted. In its Chapter IV the government deals with transitional problems, and particularly with the dangers of unemployment, mal-allocation of resources, and inflation. For the transition the government was prepared to continue price and related controls and, in particular, priorities; to favor essential against non-essential output; and to keep costs and prices down. "Balanced Distribution of Industry and Labour" is the theme of Chapter III. The part omitted deals in detail with the manner of providing adequate plants and services in depressed areas, and also the manner of encouraging the necessary mobility of labor.

which government might try to influence; (4) try to achieve international economic co-operation as the conditions for large and stable exports. Concerned over the size of the public debt, the government was not prepared to undertake a substantial investment program to keep employment up. On the price front, it would depend largely on exhortation to workers to be reasonable and employers to expand, not restrict output; but it was "prepared to do what they could to stabilise prices so as to avoid or mitigate changes not rendered inevitable by higher costs either of imports or of production at home."

In short, the medicine was a mild form of Keynesianism: monetary policy, some reliance on government spending, some adjustments in taxes to variations in demand; and, in part, direct measures to deal with structural maladjustments.

From 1944 to the early part of 1947, when the *Economic Survey for 1947* was published (a large part of which is reprinted in later sections of this chapter), important changes had taken place. A Labor government had supplanted the Churchill government; the dollar problem had proved to be more intractable than had been anticipated; and production had not recovered sufficiently. In 1947, the government could claim no more than an output level equal to the pre-war height;² and, unfortunately, exports, capital, and government required one-half of total output, whereas just before the war it had consumed but one-third. The current flow of consumers' goods, in relation to the amount of work to be done and the wages paid, was too small to elicit the best efforts of labor and management. Government had to absorb excess purchasing power by taxation, and to stimulate savings or allow them to escape to free markets where prices rose rapidly. As a result scarce manpower was attracted into relatively profitable non-essential industries. (At the end of 1946 fourteen essential industries had on the average 22 per cent less manpower than in mid-1939.) Although per-capita consumption in 1946 seemed to be well below 1938, the consumption of alcoholic beverages was 113 (1938 = 100), tobacco 135, reading materials 146, entertainment 169. Early in 1947, the government envisaged dollar deficits of more than £350 million for 1947; the export volume had fallen from 111 (1938 = 100) for the last quarter of 1946 to 108 in mid-1947. By September 1947, the anticipated deficit had grown to £600 million, approximately 40 per cent of which was to be met by import cuts.³

² A later official report, based on an estimate of *The Economist*, puts output in mid-1947 at 10-20 per cent higher than during pre-war years. Cf. British Information Services: *Labor and Industry in Britain: A Report on Britain* (Sept.-Oct. 1947), p. 170.

³ British Information Services: *Economic Record* (Sept. 25, 1947), pp. 1-2; also see Cmd. 7099, Table 26, *Economic Survey for 1947*, p. 26 and U.K.: *Statement of the Economic Considerations Affecting Relations Between Employers and Workers* (Cmd. 7018. 1947), p. 5.

In the light of the dollar famine, and the production and export crisis which it mirrored, it is not surprising that the Labor government, as revealed in the *Economic Survey for 1947*, would commit itself further in the direction of a planned economy. It was necessary to draw up a *tableau économique* of resources on the one hand, and requirements on the other; and to supplement the overall picture with budgets for investment, foreign exchange, fuel and power, steel, and so on. Controls are the means of directing the economy towards the achievement of the goal, although direct government spending will also influence the situation. Among the controls in use were rationing, allocation of raw materials, control of building and imports through licenses, and control of capital issues. Through these and other controls the government allocated scarce and essential resources. Yet the government at this time—early 1947—disavowed a desire for a detailed system of controls which would interfere with fundamental liberties: the main reliance was to be on co-operation with business and labor. Failure to implement a limited price control with manpower control had proved costly in the production and exchange crisis of 1947, when the government made its first large encroachment on fundamental liberties in peace time: the right of the worker to choose his job, or be idle if he preferred.

Despite the high level of employment in 1945-48, the British post-war economy was a scarcity economy. The war had brought destruction of capital, a large backlog of maintenance and replacement, and serious losses of export markets, foreign capital, and shipping. In the course of the Washington negotiations on the British Loan late in 1945, the British delegation announced an increase in external liabilities of from £476 million just before the war to £3,355 million on June 30, 1945; a large reduction of gold reserves; external disinvestment in the course of the war of £4.2 billion and total disinvestment at £7.3 billion, or more than a year's income. A more comprehensive statement in 1947 put the destruction or loss of British wealth at close to £30 billion, of which about two-fifths was domestic and three-fifths in external assets. Mr. Paish estimated that the British needed £14 billion over the years 1946-55 for reconstruction, only one-half of which would be available out of foreign loans, normal savings, and the like.⁴

Obviously, the government would be under great pressure to make the most effective use of the scarce items: e.g., dollars, raw materials, capital, labor. Allocations, priorities, licensing are all part of the mosaic of a semi-planned economy, as described in the *Economic Survey for 1947*. But scarcity is relative as well as absolute: the issue in part is

⁴ U.K.: *Statistical Material Presented During the Washington Negotiations* (Cmd. 6707, Dec. 1945), pp. 10-15; *Report on Britain* (1947), p. 175; F. W. Paish: "The Finance of Reconstruction," *Economic Digest*, May 1947, p. 3.

the demand for the scarce resources. In war, excess purchasing power accumulated as a result of rising wages and other incomes and the unavailability of corresponding values in consumers' goods. With war output accounting for 53 per cent of the national income at the peak of the war, and, therefore, with current income abnormally in excess of the flow of consumers' goods, and with prices depressed through subsidies and controls, excess purchasing power tended to accumulate. Potential demand was far in excess of supply at current prices.

A realistic approach to the solution of the problem of excess demand was to keep purchasing power down. But government loans from banks and the need of manufacturing money to keep interest rates low, kept purchasing power at a high level. Moreover, neither during the war nor in the early post-war period was wage policy courageous, and wages rose steadily. By January 1946, average British earnings were 74 per cent above 1938, and by October 1946, 90 per cent, a rise 3—4 times above the cost of living, and even twice as high as the rise in the cost of living estimated by the Labor government.

As has been said, the government relied primarily on exhortation to keep wages down. There is a disposition also to over-emphasize the contribution that can be made by a rise in output and productivity; these, indeed, are important objectives, but they will not solve the problem of inflation.⁵ It is important to tether wage rises to increases in production, as a means of excluding wage inflation; but even with that achievement, the inflationary danger grows in periods of rising output. More goods mean more income; and in periods of high activity the proportion of capital output to total is especially large. Therefore the excess of current income over the flow of consumption goods rises. On top of that, there is the accumulation of cash and liquid assets from the war, which the public impatiently waits to spend.

Courageous tax and wage policies must be pursued and savings stimulated if inflation is to be excluded. Otherwise the burden carried by controls—and particularly if they are selective—becomes too great. Prices in free markets rise dangerously; and the pressure to violate regulations becomes irresistible. It may well be said that in 1945-47 the British put too much reliance on their selective control system, the product of a semi-planned economy.

From 1938 to the middle of 1947, the rise in money in circulation and demand deposits was close to 200 per cent; of weekly wages 66 per cent. But the cost of living, artificially held down (as is evident in the

⁵ On productivity see especially *Report of the Cotton Textile Mission to the United States of America* (March-April, 1944); *Working Party Reports: Cotton* (1946); Ministry of Fuel and Power: *Coal Mining: Report of the Technical Advisory Committee* (Cmd. 6610, 1945).

rise of 85 per cent in wholesale prices) had increased by but 31 per cent.⁶ With the expansion of money six times the rise in the cost of living, the situation might be termed explosive. Monetary supplies and wages escaped from hoards and crowded commodity markets; but like water ready to boil over, they could be contained if the pressure did not become too great, and a firm cover was put on. Rationing, price control, and other sterilization measures helped to reduce the potential dangers.

In this connection, the following excerpts from an important British document will interest the reader.⁷ It does not seem that adequate attention has been paid to the demand aspects of the problem, as against the supply aspects.

(1) The great need of this country, as indeed of practically every other country in the world at the present time, is for a considerable and sustained increase in the production of goods of all kinds—of consumer goods and of capital goods, of goods for domestic use and consumption and for export.

(2) The position of Great Britain is extremely serious. We have in the course of the last seven years deliberately distorted and unbalanced our economic system, suffered the loss and permitted the depreciation of our capital resources, sold at least half of our external capital assets and gone into debt abroad—all for the purpose of enabling the country to concentrate its fullest efforts upon the war and in an endeavour to maintain reasonable standards of living. This country is still running into debt abroad. Each month our balance of overseas payments is still unfavourable. Nevertheless, since the end of the war this country has proceeded rapidly to establish schemes of social improvements in the way of a housing programme, an improved educational system, comprehensive old age, unemployment and health insurance systems and medical and other services. . . .

(19) The answer first and last is by increasing production. This is the only means by which we can achieve a genuine and permanent balance between the volume of purchasing power and the supply of goods available. At present there is too much money chasing after too few goods. To increase the amount of money in people's pockets does nothing to increase the amount of goods available. On the contrary, it makes the situation worse, since, if there is still more money chasing the same amount of goods, prices must sooner or later be forced up and no one will be any better off than they were before. The volume of purchasing power is already far bigger than the supply of goods at present day prices. The total amount of incomes of all sections of the community after paying income tax is well over £7,000 million, but the value of goods and services available to be bought by consumers is only about £6,000 at present prices. There is there-

⁶ Figures from *Monthly Bulletin of Statistics of United Nations* (1947).

⁷ *Statement on the Economic Considerations Affecting Relations Between Employers and Workers* (Cmd. 7018, Jan. 1947), pp. 3, 7.

fore already a great deal of leeway to be made up and this cannot be done without a concerted effort of the whole country to increase production while costs are held steady. It must be realized, however, that increased production per hour worked is not necessarily in itself sufficient. What is necessary is increased production per annum. In attaining this everyone has a part to play; the responsibility does not fall upon productive industry alone. It is as necessary to increase the work done per person in the central and local Government services, in public utility and transport services, and in the distributive trades, as it is in manufacturing industries.

We reproduce a large part of the British *Economic Survey for 1947* which points up the state of planning in 1946. *The Economic Survey for 1948* introduced targets for 1948, proclaimed that year as a precarious one, and showed how far the country had failed to attain the targets of 1947. The deficit in the balance of international payments had grown by £325 million, or 93 per cent beyond the anticipated deficit (p 57). This explains the concern over aid from the United States. In October, 1948, the British Government presented a program for the year ending June 30, 1949 (*European Co-operation*, Cmd. 7545). On the assumption of foreign aid (net) of \$981 million, the government was looking forward to stabilizing international reserves and achieving viability. By the second quarter of 1948, national production had risen to 122 (1946 = 100; 1947 = 108), and the export volume to 134 (1938 = 100 and 1947 = 109). Now the government anticipated continued improvement in production, in exports, in invisible exports, in the international deficit, and in the contributions of fiscal policy to staving off inflation.

Finally, in December 1948, the British revealed their Four Year Plan, 1949-1953 (*European Co-operation*, Cmd. 7572). We reproduce a substantial part of this document later. Here the government sets forth its views on planning:

"Any programme of economic planning must be in the nature of a broad strategical plan sufficiently flexible to meet unpredictable and rapidly changing events. . . ." (p. vi).

"Economic planning in the United Kingdom is based upon three fundamental facts: the economic fact that the United Kingdom economy must be heavily dependent upon international trade; the political fact that it is and intends to remain a democratic nation with a high degree of individual liberty; and the administrative fact that no economic planning body can be aware (or indeed ever could be aware) of more than the very general trends of future economic developments" (p. 1).

Unfortunately, space is not available to quote adequately from the excellent report on Australia. In its broad outline, the Australian report, like the British White Paper on *Employment Policy*, is Keynesian, but it

would have the government assume larger responsibilities. The Australian White Paper on *Full Employment* emphasizes large fluctuations in private investment and in export trade, and the need of taking adequate measures to offset declines in these variables. In its determination to maintain spending, Australia in 1945 seemed disposed to go much further than Britain. Particularly in the attention paid to measures dealing with fluctuations in export trade the Australian report is unique: the government maps out the measures to be taken (*e.g.*, use of reserves, re-allocation of resources, exchange depreciation and quantitative limitations on trade) according to the nature of the deterioration in the balance of payments. Finally, the report deals with wages, inflation, mobility of resources and efficiency.⁸

Canada's report, admirable as it is, is concerned primarily with transitional problems. We reproduce a few interesting paragraphs. Its objectives emphasize a high and stable level of employment, not full employment. The government recognizes the difficulty of offsetting fluctuations induced by fluctuations originating abroad. Internationally, it would rely primarily on exchange stability, free capital movements, stability in export prices, and, in general, on international co-operation. As might be expected of a country greatly influenced by the economic philosophy of the United States, Canada offers a program which might well be characterized as more orthodox even than the Churchill document, and certainly more so than the Australian.⁹

Since 1942, South Africa, under the aegis of the Social and Economic Planning Council, has issued many interesting documents. Limitation of space alone excludes reproduction of part of these.¹⁰ In fiscal policy, the government would attempt to maximize income and stabilize the cycle. These goals would be achieved in part by excluding taxes that weigh heavily on investment and consumption, by reducing taxes and raising expenditures in recession, and, conversely, increasing taxes and reducing expenditures in prosperity. The South African Council also presents interesting plans for social security, for the future of farming, and for better treatment of native labor. In farming, for example, the objective is to raise productivity, allow the adjustment of domestic to

⁸ The last is discussed in paragraphs 63-74 of the *Australian Report*, the emphasis being placed on the contributions to efficiency of adequacy of demand, measures to stimulate improvements, and proper allocation of resources.

⁹ The Canadian document will be found in *Hearings before Subcommittee on Banking and Currency U.S. Senate on Full Employment Act of 1945* (revised, 1945), pp. 104-18; the Australian, *ibid.*, pp. 86-104.

¹⁰ See especially Social and Economic Planning Council: *First Annual Report* (1945); *Taxation and Fiscal Policy* (1945); *The Future of Farming in South Africa* (1946); *Report of the Social Security Committee and Report No. 2 of the Social and Economic Planning Council* (1944); *The Native Reserves and Their Place in the Economy of the Union of South Africa* (1946).

international prices, influence the type of farming, and encourage proper measures of consumption through the use of subsidies.

We now reproduce the documentary material.

Employment Policy ¹¹

Foreword

The government accept as one of their primary aims and responsibilities the maintenance of a high and stable level of employment after the war. This Paper outlines the policy which they propose to follow in pursuit of that aim.

A country will not suffer from mass unemployment so long as the total demand for its goods and services is maintained at a high level. But in this country we are obliged to consider external no less than internal demand. The government are therefore seeking to create, through collaboration between the nations, conditions of international trade which will make it possible for all countries to pursue policies of full employment to their mutual advantage. The discussions which have been undertaken to this end are briefly mentioned in Chapter I of this Paper.

If by these means the necessary expansion of our external trade can be assured, the government believe that widespread unemployment in this country can be prevented by a policy for maintaining total internal expenditure. The measures by which such expenditure will be influenced are described in Chapters IV and V.

There will, however, be no problem of general unemployment in the years immediately after the end of the war in Europe. In this transition period our problems, though no less difficult, will be different. It will be a period of shortages. Though there will be risk of unemployment due to the dislocation involved in the gradual change from war to peace, the total manpower available will be insufficient to satisfy the total demand for goods and services. It is likely to be some time before the need arises to put into operation the long-term policy for averting mass unemployment which is described in Chapters IV and V. The Paper therefore deals first, in Chapters II and III, with the special problems of the transition period and the measures to be taken for preventing local unemployment by securing a balanced distribution of industry and labour.

Unlike other Papers on post-war problems which the government have presented or are preparing, this is not primarily an outline of projected legislation. For employment cannot be created by Act of Par-

¹¹ British White Paper on *Employment Policy* (1944), pp. 3-6, 10-11, 15-28.

liament or by government action alone. Government policy will be directed to bringing about conditions favourable to the maintenance of a high level of employment; and some legislation will be required to confer powers which are needed for that purpose. But the success of the policy outlined in this Paper will ultimately depend on the understanding and support of the community as a whole—and especially on the efforts of employers and workers in industry; for without a rising standard of industrial efficiency we cannot achieve a high level of employment combined with a rising standard of living.

Chapter I: The International and Industrial Background

(1) This Paper is concerned with the course of policy which the government propose to follow internally in order to maintain the highest possible level of employment. But the level of employment and the standard of living which we can maintain in this country do not depend only upon conditions at home. We must continue to import from abroad a large proportion of our foodstuffs and raw materials, and to a greater extent than ever before we shall have to pay for them by the export of our goods and services. For as the result of two world wars we have had to sacrifice by far the greater part of the foreign investments which we built up over many years when we were the leading creditor country of the world. It will not, therefore, be enough to maintain the volume of our pre-war exports; we shall have to expand them greatly.

(2) A country dependent on exports—and relying largely, as we do, on the export of manufactured goods of high quality—needs prosperity in its oversea markets. This cannot be achieved without effective collaboration among the nations. It is therefore an essential part of the government's employment policy to co-operate actively with other nations, in the first place for the re-establishment of general economic stability after the shocks of the war, and next for the progressive expansion of trade.

(3) The aims of this international co-operation are to promote the beneficial exchange of goods and services between nations, to ensure reasonably stable rates of exchange, and to check the swings in world commodity prices which alternately inflate and destroy the incomes of the primary producers of foodstuffs and raw materials. It will also be necessary to arrange that countries which are faced with temporary difficulties in their balance of payments shall be able both to take exceptional measures to regulate their imports and to call on other nations, as good neighbours, to come to their help, so that their difficulties may be eased without recourse to measures which would permanently arrest the flow of international trade.

(4) The government have already given proof of their intentions.

They have signed the Atlantic Charter. They have made a Mutual Aid Agreement with the government of the United States of America,¹² one of the chief aims of which is agreed action "directed to the expansion, by appropriate international and domestic measures, of production, employment and the exchange and consumption of goods." They have also declared their acceptance of the comprehensive recommendations made to the Governments and authorities of forty-four nations by the United Nations Conference on Food and Agriculture held at Hot Springs in 1943, in so far as those recommendations are applicable to conditions in the United Kingdom. One of those recommendations¹³ recognises that "the promotion of the full employment of human and material resources, based on sound social and economic policies, is the first condition of a general and progressive increase in production and purchasing power. . . . Progress by individual nations toward a higher standard of living contributes to the solution of broader economic problems, but freedom from want cannot be achieved without effective collaboration among nations."

The government are considering, with the governments of others of the United Nations, how these general agreements regarding the common ends of international economic policy can best be carried out in practice. For this purpose they are working in close consultation with the governments of the Dominions and of India. The early renewal of the economic strength of the British Commonwealth of Nations and the economic development of our colonial dependencies are among the substantial contributions we can make to stability in the world's economic order. The government will also collaborate with other governments in considering how effect may be given to the principles and recommendations recently put forward by the International Labour Organisation. Further reports on all these matters will be made to Parliament in due course.

(5) While the government will spare no effort to create, in collaboration with other governments, conditions favourable to the expansion of our export trade, it is with industry that the responsibility and initiative must rest for making the most of their opportunities to recover their export markets and to find fresh outlets for their products. In the interest of the whole national economy, our export industries must be resilient and flexible; and in the period immediately after the end of the war their claims for raw materials, labour and factory space freed from war purposes must have a high priority.

(6) Though there will be special reasons for giving this measure of early priority to the export trades, the need for increased efficiency in

¹² Cmd. 6341, 1942, part of Article VII.

¹³ Cmd. 6451, 1943, Resolution XXIV, "Achievement of an Economy of Abundance."

industry is in no way limited to those trades. To maintain and improve our standard of living there must be steady progress in the efficiency of our industry as a whole. During the war British industry has amply demonstrated its power to improve the technique of its production, and this improvement must continue if we are to solve the problems of the post-war years. The government have been considering, as part of their general reconstruction plans, what help they can give to this end. The Chancellor of the Exchequer has already announced in his Budget speech the means by which taxation policy will be adapted to foster the development of industrial research, and to facilitate the modernisation of industrial plant, machinery and buildings. These important modifications in the incidence of taxation on industry will make a substantial contribution towards industrial recovery after the war and will pave the way for a continuous technical advance throughout British industry. The means of promoting industrial efficiency will be kept under constant review—other proposals to this end are already under examination—and the government will continue from time to time to report their conclusions or present their proposals to Parliament on this subject.

(7) The earlier paragraphs of this Chapter, which were concerned with the balance of payments and the export trades, referred mainly to the manufacturing industries. In the remainder of this Paper the term "industry" is used in its widest sense to cover all the manifold activities which provide employment. Thus, it includes, not only the manufacturing and processing industries, but the industries providing raw materials and primary products, such as agriculture, forestry, fishing and mining, services such as shipping, inland transport and the distributive trades, and all the varied activities of commerce.

The prosperity of a particular industry depends partly on circumstances peculiar to that industry and partly on the general economic condition of the country. This Paper sets forth the government's policy for securing general conditions favourable to a high level of employment throughout industry as a whole. In addition, special measures may be taken from time to time which are directed to the circumstances of particular industries. The government have, for example, declared their determination to ensure that we shall have in this country after the war a healthy and well-balanced agriculture; and the special measures needed to secure this are now being discussed with representatives of the industry. This Paper does not deal with special measures which are peculiar to a particular industry. But all alike will benefit from the general policy which it describes; for, to the extent that this policy succeeds in maintaining a high level of employment, it will sustain the demand for goods and services of all kinds. . . .¹⁴

¹⁴ Chapter II. paragraphs 8-19 (pp. 6-10), omitted here, discusses the transition from war to peace.

Chapter III: The Balanced Distribution of Industry and Labour

(20) Before proceeding (in Chapters IV and V) to describe the long-term policy proposed for maintaining total expenditure, it is necessary to turn aside from the main argument of the Paper to describe the measures which the government will take to check the development of localised unemployment in particular industries and areas. Although their effect will continue for many years thereafter, these measures will begin to operate in the transition period and can therefore be described most conveniently at this point in the Paper.

(21) Apart from temporary unemployment due to the seasonal and other irregularities in particular trades, patches of longer-term unemployment develop in particular industries and areas when the demand for their products is insufficient to provide work for the whole of their labour force. This is due to a temporary or a permanent decline in an industry or group of industries caused by technical change, the trend of fashion, or the growth of foreign competition.

(22) Unemployment of this type was a familiar feature in this country's economic life between the wars. The industries affected were mainly export trades—such as cotton and coal—and some of the heavy industries which had been greatly expanded during the last war. Areas which were largely dependent upon depressed industries showed heavy unemployment percentages, not only in the basic industries, but in subsidiary local trades and occupations as well.

(23) The suffering in these areas was enhanced by their lack of a proper industrial balance. An area may be industrially unbalanced either because it is over-dependent upon a single industry or group of industries which tend to fluctuate together; or because it is predominantly concerned with the export trade, which is especially liable to sudden fluctuations not within the control of our internal policy; or because it contains industries which provide employment mainly for men or mainly for women; or because its industries are subject to unpredictable changes in demand. Dependence on a single industry and the subsidiary industries which grow up round it is a natural form of industrial development which has in the past enabled certain areas to reach the highest peak of temporary prosperity while circumstances were favourable. Shipbuilding and the heavy industries in the industrial belt of Scotland, coal and iron in South Wales, and cotton in Lancashire are examples. But the price to be paid for such temporary prosperity is high when the period of depression comes. A region like South Wales in the early twenties, with half its workers employed in getting coal, three-fifths of which was shipped overseas, was dangerously dependent upon foreign trade. Conversely, regions with a wide range of industrial skills, like Birmingham, have been able to see many of their old industries die away during the past

half century without losing their general prosperity, because they have had the resilience to develop new activities to replace those which became obsolete.

(24) The first line of attack on the problem of unemployment in these unbalanced areas must be to promote the prosperity of the basic industries on which they primarily depend, e.g., coal, steel, engineering and shipbuilding. It will be an aim of government policy to help these industries to reach the highest possible pitch of efficiency, and secure oversea markets.

Secondly, these industries, and the areas which are largely dependent on them, will share in the benefits which will flow from the government's policy (explained in Chapters IV and V) for maintaining domestic expenditure at a high level. But it will not be enough to rely on the general maintenance of purchasing power to solve all the problems of local unemployment. A solution on these lines alone would be too long drawn out and might involve the partial depopulation of industrial regions which are a national asset that we cannot afford to lose.

(25) The government therefore propose to attack the problems of local unemployment in three ways:

(a) By so influencing the location of new enterprises as to diversify the industrial composition of areas which are particularly vulnerable to unemployment.

(b) By removing obstacles to the transfer of workers from one area to another, and from one occupation to another.

(c) By providing training facilities to fit workers from declining industries for jobs in expanding industries. . . .¹⁵

Chapter IV: General Conditions of a High and Stable Level of Employment

(37) In the transition period, as we have seen, employment policy will be primarily concerned with the transfer of men and women to peace-time jobs. But however smoothly this transition can be made, and however rapid may be the return to normal conditions, there will still remain for treatment those long-term problems connected with the maintenance of an adequate and steady volume of employment which eluded solution before the war.

(38) The chart in Appendix I¹⁶ shows unemployment rates for the period 1858—1938. Throughout the period there was a fairly regular cycle of unemployment—evidence of instability in our economic system. And (although the figures are not strictly comparable throughout the whole of the period) the average level of unemployment after the war of

¹⁵ The end of Chapter III, paragraphs 26-36 (pp. 11-15), omitted here, deals with the distribution of industry and labor.

¹⁶ Omitted here.

1914-18 was, on account of the special and continuing problems of the export trades, higher than in the period before 1914.

(39) If these features which have afflicted our economic life in the past are to be banished, as it is our resolve to banish them, from the future, three essential conditions must be satisfied:

(a) Total expenditure on goods and services must be prevented from falling to a level where general unemployment appears.

(b) The level of prices and wages must be kept reasonably stable.

(c) There must be a sufficient mobility of workers between occupations and localities.

[The Maintenance of Total Expenditure]

(40) Assuming a given level of wages and prices, and full mobility of labour, workers will lose or fail to find employment because there is not a sufficiently large expenditure on the goods and services which they might produce. If more money is spent on goods and services, then more money will be paid out as wages and more people will be employed. Thus, the first step in a policy of maintaining general employment must be to prevent total expenditure (analysed in paragraph 43) from falling away. Once it is allowed to do so, a minor decline may rapidly gather momentum and take on the proportions of a major depression. If, for example, there is a decline in the demand for steel for the erection of new buildings, unemployment will first appear among steel workers. The steel workers, in consequence, will have less to spend on food and other consumer goods, so that the demand for consumer goods will fall. This leads to unemployment among the workers in the consumer goods industries who, in turn, find their purchasing power reduced. As a result of this general loss of purchasing power in the community, the demand for new building is still further reduced and the demand for constructional steel falls once again. The original decline in expenditure produces secondary reactions which themselves aggravate the source of the trouble. This is an over-simplified illustration, but it is sufficient to make it clear that the crucial moment for intervention is at the first onset of the depression. A corrective applied then may arrest the whole decline; once the decline has spread and gathered momentum, interventions on a much greater scale would be required—and at that stage might not be effective.

(41) The government are prepared to accept in future the responsibility for taking action at the earliest possible stage to arrest a threatened slump. This involves a new approach and a new responsibility for the state. It was at one time believed that every trade depression would automatically bring its own corrective, since prices and wages would fall, the fall in prices would bring about an increase in demand, and employment would thus be restored. Experience has shown, however, that under mod-

ern conditions this process of self-recovery, if effective at all, is likely to be extremely prolonged and to be accompanied by widespread distress, particularly in a complex industrial society like our own.

(42) The methods which the government propose to adopt to maintain total expenditure are described in Chapter V. It will, however, be convenient to analyse here the constituent parts of this total expenditure, for they differ greatly both in their susceptibility to fluctuations and in the ease with which these fluctuations can be controlled.

(43) In a country which could ignore the outside world these parts would be four in number :

(a) *Private Consumption Expenditure*: Private expenditure on food, clothing, rent, amusements, etc.

(b) *Public Expenditure on Current Services*: Expenditure by public authorities on education, medical services, national defence, etc.

(c) *Private Investment Expenditure*¹⁷: Private capital expenditure on buildings, machinery and other durable equipment and on additions to goods in stock.

(d) *Public Investment Expenditure*¹⁷: Capital expenditure on buildings, machinery, roads and other durable equipment by the central Government, local authorities or public utilities.

But in a community linked with the outside world some expenditure (i.e., that upon imports) does not directly lead to employment at home, while some employment at home (i.e., labour engaged in making things for export) arises out of the expenditure of people in other countries. It is convenient to allow for these facts by adding a fifth item (which may of course be a minus quantity) to the list of the constituents of total expenditure, namely :

(e) *The Foreign Balance*: The difference between exports (visible and invisible) and imports (visible and invisible).

¹⁷ Strictly speaking, *net* expenditure in both cases, i.e., after allowing for expenditure on maintenance and renewal of existing capital equipment and of goods in stock. Such expenditure, of course, also gives rise to a demand for labour, but this is already allowed for in the figure of final demand for the goods, whether capital or consumption goods, which the equipment is being used to make, and we must not count it twice. Indeed, if part of the sums currently set aside for depreciation, etc., are not actually being expended on renewals and replacements as has happened during the war, we must make a corresponding *deduction* from the expenditure on *new* equipment in order to reach the true figure of "net investment expenditure." Similarly, a deduction would have to be made for the depletion of stocks in any given period.

(44) Expenditure on private consumption is perhaps the element least liable to sudden and spontaneous variation; for, so long as people's incomes do not greatly change, their habits of buying are likely to remain much the same. Public expenditure on current services, including national defence, will also be fairly constant as a rule, unless the government decide as an act of deliberate policy to vary expenditure on some items in order to compensate for swings in other parts of total national expenditure. Public capital expenditure has in the past fluctuated considerably, largely because public authorities have often taken the view that in a period of depression, when their revenue was precarious, economy on capital expenditure was the right policy.

(45) It is, however, in the two remaining components of total expenditure—private expenditure on capital equipment and the foreign balance—that spontaneous variations are likely to be greatest and at the same time most difficult to control. A business man deciding whether it is worth his while to sink more capital into his business will be influenced by a very wide range of considerations: whether his market is likely to grow or decline; what his competitors are doing; whether prices are likely to go up or down; whether the latest type of machinery is much superior to his own, and so on. It is in practice impossible to foresee with any certainty what decisions business managements will reach on these matters: the prevailing atmosphere of optimism or pessimism, particularly in periods of rapid industrial change, probably has as much influence on them as any independent analysis of the facts.

(46) In the majority of highly industrialised communities it is expenditure on private investment which is the most usual and most potent cause of instability in total expenditure, and consequently in employment. But this country, because of the relative importance of its export trade, which before the war provided employment for about one and three-quarter million persons, is also particularly subject to fluctuations in employment arising from fluctuations in international trade. In 1929, for instance, the depression in British industry was transmitted to this country from abroad. The state of our foreign balance depends very largely upon the behaviour of persons and governments outside our jurisdiction. Our aim must therefore be to agree with other countries on international measures which will be to our mutual advantage and will render them partners with us in a common economic policy. As has been mentioned in Chapter I, the government have already embarked on such discussions, with the object of increasing and stabilising the volume of world trade.

(47) The most serious obstacles to the maintenance of total expenditure therefore lie in these highly inconvenient facts:

First, those elements in total expenditure which are likely to fluctuate

most—private investment and the foreign balance—happen also to be the elements which are most difficult to control.

Secondly, an increase in one part of total expenditure can only within limits offset a decrease in another. For if, through a decline in private investment, the construction of new factories is discontinued and building labourers are thrown out of work, it may be useful to stimulate the purchase of clothing but it would be idle to expect the building labourers to turn up the next day ready to handle sewing machines in the clothing factories. Again, if important British exports fell off sharply, it would be essential, at the earliest moment, to find alternative exports to fill the gap: an expansion of internal demand would not alone be an appropriate remedy and indeed, if it were applied too vigorously, might lead to inflation.

(48) The guiding principles of the government's policy in maintaining total expenditure will be as follows:

(a) To avoid an unfavourable foreign balance, we must export much more than we did before the war.

(b) Everything possible must be done to limit dangerous swings in expenditure on private investment—though success in this field may be particularly difficult to achieve.

(c) Public investment, both in timing and in volume, must be carefully planned to offset unavoidable fluctuations in private investment.

(d) We must be ready to check and reverse the decline in expenditure on consumers' goods which normally follows as a secondary reaction to a falling off in private investment.

The plans which are being prepared for this purpose are described in Chapter V.

[The Stability of Prices and Wages]

(49) Action taken by the government to maintain expenditure will be fruitless unless wages and prices are kept reasonably stable. This is of vital importance to any employment policy, and must be clearly understood by all sections of the public. If we are to operate with success a policy for maintaining a high and stable level of employment, it will be essential that employers and workers should exercise moderation in wages matters so that increased expenditure provided at the onset of a depression may go to increase the volume of employment.

(50) This does not mean that every wage rate must remain fixed at a particular level. There must always be room for the adjustment of wages and conditions, e.g., on account of changes in the form, method or volume of production. Also there must be opportunity for the removal

of anomalies in the rate of remuneration of different grades and categories of workers, both within an industry and between different industries. The principle of stability does mean, however, that increases in the general level of wage rates must be related to increased productivity due to increased efficiency and effort.

(51) An undue increase in prices due to causes other than increased wages might similarly frustrate action taken by the government to maintain employment. If for example, the manufacturers in a particular industry were in a ring for the purpose of raising prices, additional money made available by government action for the purpose of maintaining employment might simply be absorbed in increased profit margins and no increase in employment would result.

(52) Stability of wages and stability of prices are inextricably connected. If the general level of wage rates rises and there is a corresponding increase in prices of goods for civilian consumption, the individual wage-earner will be no better off and there may be no increase in the total amount of employment available.

(53) Thus, the stability of these two elements is a condition vital to the success of employment policy; and that condition can be realised only by the joint efforts of the government, employers and organised labour. The government for their part are prepared to do what they can to stabilise prices so as to avoid or mitigate changes not rendered inevitable by higher costs either of imports or of production at home. If, however, the cost of living is thus kept stable it must be regarded as the duty of both sides of industry to consider together all possible means of preventing a rise in the costs of production or distribution and so avoiding the rise in prices which is the initial step in the inflationary process.

(54) Workers must examine their trade practices and customs to ensure that they do not constitute a serious impediment to an expansionist economy and so defeat the object of a full employment programme.

Employers, too, must seek in larger output rather than higher prices the reward of enterprise and good management. There has in recent years been a growing tendency towards combines and towards agreements, both national and international, by which manufacturers have sought to control prices and output, to divide markets and to fix conditions of sale. Such agreements or combines do not necessarily operate against the public interest; but the power to do so is there. The government will therefore seek power to inform themselves of the extent and effect of restrictive agreements, and of the activities of combines; and to take appropriate action to check practices which may bring advantages to sectional producing interests but work to the detriment of the country as a whole.

[The Mobility of Labour]

(55) Even if there is an adequate overall demand for labour, maintained by a total expenditure sufficient to provide every worker with a job, it does not follow that unemployment will altogether disappear. In an economy which aims at keeping employment at its highest level, change will always be going on; new industries will be starting up, new processes replacing old; new ways of meeting consumers' demand will be under experiment. Numbers of people will therefore be registering as unemployed at Employment Exchanges on any particular date—there will always be people who are changing from one job to another, or are unemployed for some such temporary reason. If short-term unemployment arising from such causes is to be reduced to a minimum every individual must exercise to the full his own initiative in adapting himself to changing circumstances. The government will assist by the measures designed to bring the men to the work and the work to the men which have been described in Chapter III. They will also seek to prevent mobility of labour being impeded by arrangements of a type sometimes made before the war whereby workers worked part-time and claimed unemployment benefit for the rest of the work.

(56) It would be a disaster if the intention of the government to maintain total expenditure were interpreted as exonerating the citizen from the duty of fending for himself and resulted in a weakening of personal enterprise. For if an expansion of total expenditure were applied to cure unemployment of a type due, not to absence of jobs, but to failure of workers to move to place and occupations where they were needed, the policy of the government would be frustrated and a dangerous rise in prices might follow.

Chapter V: Methods for Maintaining Total Expenditure [Capital Expenditure]

(57) If we could stop violent fluctuations in public and private capital expenditure taken together, and could keep the foreign balance reasonably stable, we should have gone far to prevent wide variations in demand and consequently in general employment. The following paragraphs outline the measures by which the government propose, as part of their long-term policy, to influence the volume of capital expenditure, private and public.

(58) In ordinary times the volume of capital expenditure is influenced by movement in the rate of interest. If the cost of borrowing money is high, some projects which are not profitable at that rate will be held back. When it falls again, those projects will be brought forward and others will also be taken in hand.

(59) For some time after the end of the war it will be necessary, as explained in paragraph 16, to maintain a policy to cheap money. Thereafter, the possibility of influencing capital expenditure by the variation of interest rates will be kept in view. The experience gained since 1931 of co-operation in this field between the Treasury and the Bank of England and the Joint Stock Banks will make it possible to operate a concerted and effective monetary policy designed to promote stable employment.

(60) Monetary policy alone, however, will not be sufficient to defeat the inherent instability of capital expenditure. High interest rates are more effective in preventing excessive investment in periods of prosperity than are low interest rates in encouraging investment in periods of depression.

(61) The government therefore propose to supplement monetary policy by encouraging privately-owned enterprises to plan their own capital expenditure in conformity with a general stabilisation policy. The larger private enterprises may be willing to follow, in their own interests, the example set by the government in the timing of public investment and to adjust their activities accordingly. For to a strong and well-established business, confident of its long-run earning powers, there are obvious attractions in executing plans for expansion or for the replacement of obsolete plant at times when costs are low. And a wider understading of the social importance of the aims of employment policy should inform and reinforce the interest which business men as a whole undoubtedly have in evening out fluctuations in capital expenditure. A further inducement would be provided if it were found practicable to adopt a device similar to that of the deferred tax credits mentioned in paragraph 72 below and calculated to stimulate capital expenditure at the onset of a depression. This and other possible methods of influencing the volume of private investment will continue to be studied as knowledge and experience of the new technique for maintaining total expenditure are accumulated.

(62) Public investment can, however, be used more directly as an instrument of employment policy.

Only a small proportion of public capital expenditure is undertaken by the central government, by far the greater part being within the province of local authorities and public utility undertakings. In the past, capital expenditure by these authorities has generally followed the same trend as private capital expenditure—it has fallen in times of slump and risen in times of boom, and has tended therefore to accentuate the peaks and depressions of the trade cycle. In the future, government policy will be directed to correcting this sympathetic movement. It should be possible for the government to maintain the stability of public investment when private investment is beginning to fall off at the onset of a depres-

sion. But this may not be enough: for the purpose of maintaining general employment it is desirable that public investment should actually expand when private investment is declining and should contract in periods of boom. There are, however, practical limits to the extent to which government action can produce swings in public investment to offset such swings in private investment as it cannot prevent. Thus, a large part of the capital expenditure of public authorities—for example on housing, schools and hospitals—is dictated by urgent public needs, the satisfaction of which cannot readily be postponed to serve the purposes of employment policy. And, in the other direction, the government could not compel substantial acceleration of the capital programmes of these public authorities without much more power of direction that they now possess. There are, therefore, limits to the policy; but within those limits the government believe that they can influence public capital expenditure to an extent which will be of material value for the purpose of maintaining employment.

(63) The procedure which the government have in mind is as follows. All local authorities will submit annually to the appropriate Department their programme of capital expenditure for the next five years. For the first of those years, at least, the plans will have been worked out in all details and will be ready for immediate operation; for the later years they will naturally be increasingly tentative and provisional. These programmes will then be assembled by an appropriate co-ordinating body under Ministers and will be adjusted, upward or downward, in the light of the latest information on the prospective employment situation. If this entails a slowing down of programmes, adequate powers, through the withholding of loan sanctions or grants, are ready to hand. If it entails an acceleration, the government will, by granting loan sanctions or otherwise facilitating finance, bring forward projects which otherwise might have had to wait for a later opportunity.

The government are considering the lines on which this procedure can be applied to the programming of capital expenditure by public utility companies.

The machinery envisaged in this paragraph will enable the government to set each year a target for the whole volume of public works in the succeeding year.

(64) In order that public investment may be more quickly mobilized to redress the balance of private investment the government also intend to seek means of reducing the time-lag which ordinarily intervenes between a decision to undertake public capital expenditure and the actual start of the work. Speed here is crucial, for if a decline in demand can be caught quickly enough and corrected, a comparatively modest amount of compensating expenditure will be sufficient to restore the balance.

The government therefore propose that the existing arrangements

between themselves and other public authorities should be reviewed, in consultation with those authorities, in order that any causes of unnecessary delay in varying the level of this expenditure may be removed. There may also be other retarding influences, e.g., in Parliamentary Private Bill procedure, which are capable of improvement.

(65) Finally, forward planning may have to be carried down to the industries which supply the primary needs of public investment. Much time would be saved if, in those capital industries which are most subject to fluctuations and are the first to be affected by an increase in public investment, attention had been given before hand to the quickest ways of switching production from the types of article needed for private investment to the types required for those forms of public investment which stand highest in priority on the reserve list of public works.

(66) The government believe that in the past the power of public expenditure, skilfully applied, to check the onset of a depression has been underestimated. The whole notion of pressing forward quickly with public expenditure when incomes were falling and the outlook was dark has, naturally enough, encountered strong resistance from persons who are accustomed, with good reason, to conduct their private affairs according to the very opposite principle. Such resistance can, however, be overcome if public opinion is brought to the view that periods of trade recession provide an opportunity to improve the permanent equipment of society by the provision of better housing, public buildings, means of communication, power and water supplies, etc.

[Consumption Expenditure]

(67) If despite our efforts, there are still swings in capital expenditure, with consequent fluctuations in the expenditure of people engaged in the industries producing capital goods, such as the iron and steel industry, the incomes of persons engaged in making clothing, wireless sets and other goods for consumption will also be lowered. These persons in turn will reduce their rate of consumption of food and other goods and thus the influence of the original swing in investment will be rapidly transmitted throughout the whole range of industries.

(68) We must create another line of defence against this progressive degeneration of the state of trade by putting ourselves in a position to influence the community's expenditure on consumption. Here again, speed will be essential. The ideal to be aimed at is some corrective influence which would come into play automatically—on the analogy of a thermostatic control—in accordance with rules determined in advance and well understood by the public.

For this purpose the government, after examining a number of methods, favour the adoption, when settled conditions return, of a scheme for varying, in sympathy with the state of employment, the

weekly contribution to be paid by employers and employed under the proposed new system of social insurance. The standard rate of contribution would be assessed on the basis of a forecast of the average level of unemployment, in such a way as to keep the social insurance fund in balance over a number of years. But the rate of contribution actually levied would exceed the standard rate at times when unemployment fell below the estimated average level and would be less than the standard rate at times when unemployment exceeded this average. An outline for a scheme of this kind is set out, by way of illustration, in Appendix II.¹⁸

(69) The effect of this scheme would be that, above a certain level of unemployment, a rise of two points in the unemployed percentage would decrease by an average of £500,000 a week the total of the social insurance contributions paid by workers in employment—apart from the corresponding reduction in the costs of employers. This would substantially augment the purchasing power in the hands of employed workers; and the additional money thus left in the hands of many millions of people would help to maintain demand for consumers' goods, thereby offsetting, at least in part, the decline in the expenditure of those who had lost their employment. This maintenance of purchasing power would reduce substantially the variations in total expenditure and employment.

(70) A plan of this kind is in no way inconsistent with the contributory basis of the social insurance scheme. It is still intended that over a period of years the contributions to the fund, supplemented by state assistance on the agreed scale, should balance its outgoings, and that the standard rates of contributions should be altered from time to time of necessary to secure this result.

(71) A scheme for varying social insurance contributions would be an inappropriate remedy for the type of unemployment which is likely to arise in the transition period. Moreover, there would be serious risk of confusion if such a scheme were brought into operation too soon after the introduction of the new system of social insurance. The introduction of that system will itself present a formidable problem of administration for the state, and contributors also will need time to adjust themselves to the new conditions. On both grounds it would be preferable that there should be an interval for the new system to establish itself before this additional complication is introduced. While, therefore, the plan and any necessary qualifications of it will be drawn up in detail, it will not be put into operation until the abnormal conditions of the immediate post-war years have disappeared.

(72) The government have also examined a number of other devices for influencing the volume of consumption, such as the variation of rates

¹⁸ Not reproduced here.

of taxation and the incorporation of some system of deferred credits as a permanent feature of national taxation. Since after the war a very considerable proportion of the national income will have to be taken in taxes, it is clear that relatively small variations in rates of taxation, whether effected by deferred credits or otherwise, will have a significant effect on the purchasing power available to the public and so on employment. Deferred credits are preferable to any system of direct variation which, apart from its other disadvantages, would come into operation more slowly than an effective policy demands. If experience should show that the variation of social insurance contributions was of value in keeping employment steady at a high level, but that another instrument for operating upon the volume of consumption was also desirable, it might well become a matter for consideration whether in prosperous times rather more taxation should be raised than was necessary for the Budget requirements of the year and that excess treated as a credit repayable to the taxpayers in bad times.

(73) These measures would operate by increasing the purchasing power in the hands of consumers. There is also the possibility, to which reference has already been made in paragraph 44 above, that the government might directly sustain employment in consumer goods industries by placing orders at a time when the normal demand for their products was flagging.

The government are large purchasers of certain types of consumer goods, e.g., boots, clothing and furniture; and they could within limits vary the volume of these orders according to the general state of trade. Local authorities could also be invited to aim at a similar variation in their orders for stores of this kind. If all public authorities adopted a policy of buying for stock when employment was flagging and allowing their stocks to run down when trade was brisk, they would make some contribution towards the stability of employment in those industries.

It might be suggested that the government should go further and should place orders for consumer goods which are not required for government use with a view to meeting a temporary deficiency in demand. This would, however, involve the purchase of goods by the government for subsequent re-sale to the public, and there would be a risk that government stocks overhanging the market would create uncertainty and cause traders to reduce or postpone their orders for these goods. It is possible that for certain classes of goods government orders could be placed without risk of these consequences; and it is proposed to continue the study of this problem. Further examination is also being made of other methods for influencing the volume of employment in the consumer goods industries, including the possibility of regulating hire purchase transactions according to the state of trade.

[Central Finance]

(74) None of the main proposals contained in this Paper involves deliberate planning for a deficit in the National Budget in years of sub-normal trade activity. A policy of low interest rates is helpful rather than otherwise to the Budget. Any action which can be taken to improve our foreign balance works in the same direction. The designed variations in the capital position of the social insurance fund will not affect the Revenue Budget. Financial inducements to public authorities to expand capital expenditure will mainly take the form of an annual grant towards meeting recurrent charges on the loans raised and their burden will consequently be spread over a long period. Moreover, the success of measured designed to stabilise the national income and prevent cyclical depressions will have the effect of ironing out Budget deficit which are normally associated with severe depression.

(75) Much of the public capital expenditure by public authorities which has been described is likely to be remunerative in the commercial sense and will amortise itself. There will be other public capital expenditure—e.g., on roads, schools, parks, etc.—which provides no assets yielding income; but in modern communities borrowing for services of this kind is, within certain limits, regarded as normal practice. If the finances of local authorities are prudently administered, and a proper relation is kept between the growth of capital expenditure and the buoyancy of trade income, it is unlikely that the growth of their indebtedness would involve an intolerable burden on local rates. If, however, the additional capital expenditure which local authorities are asked to undertake for reasons of employment policy would involve such a burden, the government would contemplate giving further financial assistance to them.

(76) Nevertheless, the general growth of public indebtedness needs to be watched from a central standpoint. As a result of two wars within one generation the national debt is now extremely large—both absolutely and in relation to the national income. Whatever problems may arise from the growth of productive or semi-productive debt, they will be mitigated if we can move as soon as possible into a state of affairs in which an effective reduction can be made from year to year in that part of the public debt which is a dead-weight war debt. We start with a handicap. In the transition period, when demand will be buoyant, the government would normally expect to budget for a surplus in order to prepare for the lean years. But during this period that aim is not likely to be achieved. On the one hand government expenditure will still be very high on defence and on reconstruction projects which cannot be delayed; and on the other hand there will be a pressing need to reduce the present very high level of taxation in order to encourage industrial

re-equipment. It is inevitable therefore that we should emerge from the transition period with some increase in our public indebtedness.

(77) The policy of steadily decreasing the dead-weight debt, while other forms of debt are increasing, does not mean a rigid policy of balancing the Budget each year regardless of the state of trade. Such a policy is not required by statute nor is it part of our tradition. There is nothing to prevent the Chancellor of the Exchequer in future, as in the past, from taking into account the requirements of trade and employment in framing his annual Budget. As the same time, to the extent that the policies proposed in this Paper affect the balancing the Budget in a particular year, they certainly do not contemplate any departure from the principle that the Budget must be balanced over a longer period.

(78) Not only the national dead-weight debt in the narrow sense, but other public indebtedness which involves directly or indirectly a charge on the Exchequer or on the rates, reacts on the financial system. Interest and other charges thus falling on the Exchequer are often regarded as in the nature of a transfer income in the hands of the recipients and as imposing no real burden on the community as a whole. But the matter does not present itself in that light to the taxpayer, on whose individual effort and enterprise high taxation acts as a drag. At the same time, proper limits on public borrowing also depends on the magnitude of the debt charge in relation to the rate of growth of the national income. In a country in which money income is increasing, the total debt can be allowed to increase by quite appreciable amounts without increasing the proportionate burden of the interest on that debt. Owing to the prolonged decline in the birth rate and the present age distribution on the population we can no longer rely, as in the past, on an increase in the national income resulting solely from an increase in the number of income-earning persons. It is also possible, though not certain, that we may find that we receive a smaller volume of goods from abroad in exchange for a given quantity of our exports. On the other hand, these difficulties would be more than offset by continued progress in technical efficiency, which is the dominating factor in the growth of real national income. If British industry carries into the peace the inventive power, technical skill and adaptability which it has shown during the war, we shall be able in due time to carry our burdens without a sense of excessive strain.

(79) Both at home and abroad the handling of our monetary problems is regarded as a test of the general firmness of the policy of the government. An undue growth of national indebtedness will have a quick result on confidence. But no less serious would be a budgetary deficit arising from a fall of revenue due to depressed industrial and commercial conditions. Therefore, in controlling the situation, especially in the difficult years after the war, the government will have equally in mind the

need to maintain the national income, and the need for a policy of budgetary equilibrium such as will maintain the confidence in the future which is necessary for a healthy and enterprising industry.

Chapter VI: The Policy in Practice

(80) In submitting proposals for an extension of state control over the volume of employment, the government recognise that they are entering a field where theory can be applied to practical issues with confidence and certainty only as experience accumulates and experiment extends over untried ground. Not long ago, the ideas embodied in the present proposals were unfamiliar to the general public and the subject of controversy among economists. Today, the conception of an expansionist economy and the broad principles governing its growth are widely accepted by men of affairs as well as by technical experts in all the great industrial countries. But the whole of the measures here proposed have never yet been systematically applied as part of the official economic policy of any government. In these matters we shall be pioneers. We must determine, therefore, to learn from experience; to invent and improve the instruments of our new policy as we move forward to its goal. And it would be no less foolish to ignore, than to be dismayed by, the certainty that unsuspected obstacles will emerge in practice.

(81) The government intend to establish on a permanent basis a small central staff qualified to measure and analyse economic trends and submit appreciations of them to the Ministers concerned. Particularly during the crucial early years of the scheme the responsibilities of this central staff will be very heavy; for many of the decisions required to carry out the government's employment policy will depend on quick and accurate diagnosis. A slump may develop with fearful rapidity: in 1920-21 unemployment rose from 5 to 15 per cent in four months. Again, it is essential that we should not mistake the disease and so apply the wrong remedy. If, for example, we were to try to cure by means of stimulating total expenditure an outbreak of unemployment which was really due to a temporary maldistribution of the labour force, we might create a dangerous inflation. Similarly, isolated or incidental trade recessions will have to be distinguished from those which herald the onset of general unemployment. Questions of timing will be equally delicate: it is no easy matter to judge when a period of growing prosperity has reached its climax, is in process of turning into an inflation and requires corrective action.

(82) The success of the government's policy will thus depend on the skill which is shown in putting general ideas into day-to-day practice. It is therefore vital for them to obtain, more fully and much more quickly than they have in the past, exact quantitative information about current economic movements. Without this, informed control would be impos-

sible and the central staff which it is proposed to set up would be left to grope and flounder in uncertainty. The government appeal with confidence to industry to join with them in a task which is essentially co-operative; for only industry can provide the statistical information required and only a central authority can classify and analyse information drawn from the country as a whole. Just as the central organisation of a successful business must be in a position to know what is happening to each of its various branches, so the state cannot make its plans without knowledge of what is happening throughout the whole range of industry and commerce. Information provided for this purpose will of course be treated as confidential; and figures will not be published in a form which would prejudice the position of any individual firm.

(83) The following are the principal classes of statistics (in addition to those available before the war) which must be obtained for the efficient operation of an employment policy:

(a) Statistics of employment and unemployment, including quarterly or monthly statements of present and prospective employment in the main industries and areas in the country, based on returns from employers.

(b) Regular information relating to savings, projected capital expenditure by public authorities, and, as far as possible, by private industry.

(c) An annual census of production showing the structure of the main groups of industries in the preceding year, including, *inter alia*, details of the quantity and value of output, stocks, and work in progress.

(d) Monthly figures of production, consumption and stocks, and, if possible, figures of orders on hand, based on sample returns obtained periodically throughout the year from large firms, trade associations, and public institutions.

(e) Annual and quarterly estimates of foreign capital movements and balance of foreign payments.

(84) It is also proposed to develop the annual White Paper on National Income and Expenditure by providing a much more complete analysis than has hitherto been possible of the constituent parts of the country's total expenditure. In particular, direct estimates will be made of the various types of capital expenditure and the various sources of savings. This will be, in effect, the Capital Budget of the nation's wealth.

(85) This central analysis of our financial position, which will be subject to continuous review and adjustment throughout the year, will serve as a basis for determining what measures are required to maintain employment and secure a rising standard of living. It will be essential,

therefore, that at every stage there should also be parallel studies of the manpower position. These will be undertaken by the Ministry of Labour and National Service who, in the light of the knowledge and experience which they have acquired during the war, will be specially well-equipped to keep the employment situation throughout the country under constant review and to direct attention to the employment aspects of national policy. The surveys prepared by the Ministry of Labour will indicate the probable supply of labour over the coming period, the prospective changes in employment in the different industries, and the effects upon employment of government projects designed to modify the volume of investment of expenditure. The correlation of these complementary budgets—for total expenditure and for manpower—will thus play a vital part in the formulation of government policy for the maintenance of employment.

(86) The Debates on the Budget will in future provide an annual opportunity for Parliament to review the financial and economic health of the country as a whole, and to consider the prospects for the coming year. Parliament will thus be asked to join with the government in framing and approving the general strategy for maintaining employment. If, however, the policy set forth in this Paper is to be successful, the government of the day must be able to take the tactical decisions for which it calls—and to take them quickly. Measures to increase total expenditure at the onset of a depression may well be welcome; but the restraining measures appropriate to a boom may meet with opposition unless they are seen and understood as part of a continuing policy for maintaining employment, and accepted as the price that must be paid for the success of that policy over the long period. If action is to be taken quickly enough to have its full effect, the government of the day must be able to rely on the support and co-operation of the public in applying the principles of an agreed national policy.

(87) The government believe that, once the war has been won, we can make a fresh approach, with better chances of success than ever before, to the task of maintaining a high and stable level of employment without sacrificing the essential liberties of a free society. They have set out in this Paper the lines on which they believe that task can most hopefully be attacked. In framing these proposals the government have had in mind the more general aim of securing for the nation the most effective use both of its man-power and of its material resources. That aim can be achieved only if the whole productive power of the nation is employed efficiently: it is not enough that it should be employed. The government therefore seek to achieve both work for all and a progressive increase in the economic efficiency of the nation, as joint elements in a growing national power to produce, to earn, and to enjoy the fruits of increased well-being.

United Kingdom: Economic Planning¹⁹*Introductory*

(1) The object of economic planning is to use the national resources in the best interests of the nation as a whole. How this is done must depend upon the economic circumstances of the country, its stage of political development, its social structure and its methods of government. The proper system of economic planning for the United Kingdom must start from this fact, and cannot follow some theoretical blueprint. The following paragraphs describe what has been done so far. They do not lay down any hard-and-fast system but rather explain the attempts which have been and are being made to arrive at the best system of economic planning for this country.

(2) There are over 20 million workers in this country. They work with the aid of a vast capital equipment of factories, mines, railways, power stations, farms and buildings, which has been gradually built up over the last hundred years. They use raw materials drawn from all over the world. This manpower, and the materials and equipment it uses, constitute the national resources. Together they produce goods and services to a value of well over £8,500 millions a year; this is the value of the total amount of work done by the nation.

(3) This body of workers and the goods and services they produce must satisfy five main national needs:

(a) *Defence.* There must be enough men and women in the Armed Forces to carry out our military commitments, and enough equipment must be produced for them.

(b) *Payment for Imports.* At least half our food is imported, and most of the basic materials for industry. Enough exports must be produced to pay for them.

(c) *Capital Equipment and Maintenance.* The capital equipment of the nation—houses, machinery, power plant, roads, &c.—must be continually repaired and maintained, and should be steadily modernised and expanded. More machine-power increases the output per man-hour, and thus the national resources. The production and maintenance of capital equipment is technically called “investment.”

(d) *Personal Consumption.* The regular consumption needs of the people must be met by the production, importation, transport and distribution of goods, and by the supply of services, such as banking, entertainment and facilities for travelling.

(e) *Public Services.* There must be enough men and women to carry on the services provided by public authorities, such as educa-

¹⁹ *Economic Survey for 1947* (Cmd. 7046), pp. 4-9.

tion, posts and telephones, police, street cleaning and the public administration generally.

There are now special needs under (c) resulting from the war-time destruction and from six years' interruption of the repair, maintenance and development of machinery, factories, houses, shops and other buildings.

(4) These are the claims upon the nation's work. If more is required for one of these claims, it can be obtained only at the expense of the others, unless the total amount of work done is increased. If the total resources are reduced, by unemployment or by a fall in the output per man-year, then less of these requirements can be met.

(5) An examination of how to carry out the purpose of economic planning so as to achieve full employment was made during the war, and the results were given in the White Paper on Employment Policy (Cmd. 6527) issued by the Coalition Government in May 1944.

(6) Shortly after the end of the war, the present government began to build up administrative machinery for economic planning. Some account of this was given in the debate in the House of Commons on 27th and 28th February, 1946.

(7) This organisation came into being at the time when the main national need was to carry out demobilisation, to convert the munitions industries, and to set the civilian economy moving again. Its first task was to examine the rapidly changing situation, and to guide it as far as possible so as to ensure that first things came first. This Paper describes what has happened in the eighteen months since the war ended, and lays down what is required in 1947.

The Kind of Plan

(8) There is an essential difference between totalitarian and democratic planning. The former subordinates all individual desires and preferences to the demands of the state. For this purpose, it uses various methods of compulsion upon the individual which deprive him of the freedom of choice. Such methods may be necessary even in a democratic country during the extreme emergency of a great war. Thus the British people gave their war-time government the power to direct labour. But in normal times, the people of a democratic country will not give up their freedom of choice to their government. A democratic government must therefore conduct its economic planning in a manner which preserves the maximum possible freedom of choice to the individual citizen.

(9) Moreover, our methods of economic planning must have regard to our special economic conditions. Our present industrial system is the result of well over a century's steady growth, and is of a very complex nature. The decisions which determine production are dispersed among

thousands of organisations and individuals. The public is accustomed to a wide range of choice and quality in what it buys. Above all, our national existence depends upon imports, which means that the goods we export in return must compete with the rest of the world in price, quality and design, and that our industry must adapt itself rapidly to changes in world markets.

(10) It follows that it is of the first importance that planning in this country should be as flexible as possible. In our determination to avoid the waste of unemployment we must not destroy the essential flexibility of our economic life.

(11) There are a number of basic industries and services—coal, power, steel, agriculture, transport, building—the efficient development of which is fundamental to our entire productive activity. A long-term plan is being developed for each of these industries. It must be one of the chief aims of the government's economic plan to see that these programmes are pressed forward as fast as possible, and kept in proper relationship with each other and with the rest of the economy.

(12) Starting from these considerations, the government is seeking to develop a system of economic planning, of which the following are the chief elements:

(a) An organisation with enough knowledge and reliable information to assess our national resources and to formulate the national needs.

(b) A set of economic "budgets" which relate these needs to our resources, and which enable the government to say what is the best use for the resources in the national interest.

(c) A number of methods, the combined effect of which will enable the government to influence the use of resources in the desired direction, without interfering with democratic freedoms.

(13) This system makes full use of the successful war-time experience in managing the nation's economic resources. Certain peace-time problems, such as control of balance of payments, can be handled by much the same techniques as were used for allocating our resources of manpower, materials and shipping during the war. Over the economy as a whole, however, the circumstances are entirely different. During the war, the government could direct labour and was the direct purchaser of a large part of the nation's production. These two factors gave the government a control over the course of production which no longer exists. The government's influence in peace-time must be exercised by other less drastic measures.

(14) The main emphasis so far has been laid upon relatively short-term planning—planning for the next year ahead. This was the most

urgent need—a guide to the vast number of decisions which had to be taken in the short-term allocation of resources. But exactly the same approach can be and is being applied to the longer-term problem, in order to secure a balanced development of the economy as a whole. It is too early yet to formulate the national needs over, say, a five-year period with enough precision to permit the announcement of a plan in sufficient detail to be a useful practical guide to industry and the public. There are still too many major uncertainties, especially in the international economic field. But a considerable amount of work is being done on these lines, in order to clarify the national objectives for a longer period ahead than is covered by this Paper, and to provide a framework for the long-term decisions of government and industry.

How the Plan Is Made

(15) For a broad analysis of the national position, economic “budgets” are prepared for the period under discussion (at present the following year) setting out resources and requirements in terms of (a) manpower, and (b) national income and expenditure. The manpower budget compares the estimated future working population with the number of workers required, industry by industry. The national income and expenditure budget compares the estimated value of the national production of goods and services with the value of all the goods and services required.

(16) These economic “budgets” are prepared by a central staff, working with representatives of the Government Departments concerned under an Official Committee. On the resources side, the Ministry of Labour forecasts the working population, and an estimate is made on the best evidence available of the prospective value of output. In regard to requirements, the position is less simple. Some, such as the manpower for the Armed Forces, originate within the governmental machine. Others originate outside the areas of governmental control, but are sponsored by Government Departments; for example, the Ministry of Transport is responsible for starting the requirements of the railways for equipment and maintenance, and the Ministry of Food for starting the estimated expenditure by the public on food. Others again, where no government control operates, are estimates of what the market will claim.

(17) These statements are supplemented by analyses of particular problems; e.g.: (a) foreign exchange; (b) investment (*i.e.*, capital equipment and maintenance); and (c) fuel and power, steel, timber and other scarce materials.

(18) The foreign exchange statement compares our import requirements with our prospective income from exports, visible and invisible.

Consideration of this statement, in relation to the rate at which we can afford to spend the United States and Canadian credits, provides the basis for deciding on the one hand the import programme, and on the other the export target. The latter is a claim on the manpower "budget."

(19) The investment statement compares the estimate of what is required to be spent on capital equipment and maintenance, with the labour and materials available for the industries which produce equipment, such as building and engineering. The production of the engineering industry must be divided between these home needs and the export market. It is also necessary to make sure that the plans under this head are consistent with the funds which are estimated to become available for financing capital work, which is an item in the national income "budget."

(20) The statements for fuel and power, steel and other scarce materials show the effect upon the whole economy of shortages of these basic supplies.

(21) At the present time, a first comparison always shows a large excess of requirements over resources. This means that, unless action is taken to increase resources or to curtail requirements, there will be a scramble for labour and goods. At the end of the period under consideration, it will, of course, be found that these economic budgets will have balanced: no more goods can in the end be sold than are produced, and no more men and women can be employed than are ready to work. The gap between resources and requirements will in the end be closed by some of the requirements being left unsupplied. But if the process of closing the gap is left to chance, some vital requirements are sure to be squeezed out by the less essential. For example, if women who are needed in the textile mills go to work in shops, the whole population will go short of clothing and curtains and sheets.

(22) These economic "budgets" are entirely different in character from the Chancellor of the Exchequer's yearly Budget. They deal with man-years of work and quantities of goods; these may be totalled in terms of money, for that is the only way to add up the host of things which constitute the national production and consumption, but the money figures are really a short-hand for expressing production. The economic budgets must balance themselves ultimately, for it is impossible to consume more than is produced; the real question is how the balance is brought about. The Chancellor's Budget, on the other hand, deals solely with money; it is his estimate of the government revenue and expenditure, and forecasts a net surplus or deficit on the transactions of the central government. The economic "budgets" have a considerable bearing upon the Chancellor's Budget, but the two forms of national account are entirely different and should not be confused.

Attaining a Balance

(23) The two economic "budgets" and the various special statements described in the preceding section are first considered by the Official Committee referred to in paragraph 16. They must be balanced, by measures to increase resources or to curtail requirements. Otherwise less essentials will push essentials out of the queue. Too many luxuries will be produced, and not enough food and clothes and coal; too many toys and not enough children's boots; too many greyhound tracks and not enough houses; too much for home consumption and not enough exports to buy our essential imports.

(24) Resources can be increased by increasing the labour force, or by a bigger output per man-year, or by a combination of the two. On the other hand, a reduction in the labour force or a reduction in the output per man-year—by lower efficiency or by shorter hours or increased holidays unaccompanied by a compensating increase in hourly output—reduces the total resources, and means that even less of the requirements can be met than before.

(25) Planning the allocation of resources between the various national requirements is at present a task of deciding which out of a number of claimants must go short—in other words, which are the more important national priorities. It is precisely the same problem, only on a national scale, as the housewife has to solve every week. On one side are the resources which we have to spend. On the other side are the things upon which we want to spend them. The two must be made to match. After full examination of possible means of attaining balance, the Official Committee submits to Ministers a report on the whole position. Ministers then decide what measures should be taken, and their decisions form the basis for subsequent action.

(26) The apparatus of government controls is used to guide the economy in the direction which is indicated by the plan. Over an important part of the national economy, the government can exercise direct influence. The level of government expenditure approved by Parliament, and the expenditure of other public authorities, determines the amount of production of a wide range of goods and services, e.g., education, public housing, supplies for the Armed Forces; the policies of the socialised industries and services have a substantial effect upon the whole economy, and are ultimately subject to government control. The government's fiscal policy can exert indirect influence over the course of production. There are now a large number of direct controls, the purpose of which is to allocate scarce resources of all kinds between the various applicants for their use—rationing, raw material controls, building licensing, production controls, import licensing, capital issues con-

trol, &c. Other controls again, such as price control, influence the course of production by limiting profit margins.

(27) This control apparatus, taken as a whole, can have a substantial effect upon the course of the national economy. But the controls cannot by themselves bring about very rapid changes or make very fine adjustments in the economic structure. To do this, they would have to be much more detailed in their application and more drastic in their scope. Indeed, the task of directing by democratic methods an economic system as large and complex as ours is far beyond the power of any governmental machine working by itself, no matter how efficient it may be. Events can be directed in the way that is desired in the national interest only if the government, both sides of industry and the people accept the objectives and then work together to achieve the end.

(28) This section would be incomplete without some reference to relative wage levels and conditions of work in different industries, since these are of great importance in their effect on the distribution of the labour force throughout the industrial structure. The government, in full association with both sides of the National Joint Advisory Council, recently issued a White Paper (Cmd. 7018) which contained a full statement of the economic considerations affecting relations between employers and workpeople. This paper was intended to assist both sides of industry in assessing their responsibilities in the light of the economic situation of the country as a whole. It need only be said here that it is essential that costs and prices should be held steady and if possible reduced and therefore that, while the government adheres to its long-term objective of raising the standard of living of the people, any further general increases in wages and profits must be accompanied by a corresponding increase in production.

(29) The government's conception of planning as described in this paper follows clearly from the difference between totalitarian planning and democratic planning as set out in paragraph 8. Under democracy, the execution of the economic plan must be much more a matter for co-operation between the government, industry and the people, than of rigid application by the state of controls and compulsions. The government must lay down the economic tasks for the nation; it must say which things are the most important and what the objectives of policy should be, and should give as much information as possible to guide the nation's economic activity; it must use its powers of economic control to influence the course of development in the desired direction. When the working pattern has thus been set, it is only by the combined effort of the whole people that the nation can move towards its objective of carrying out the first things first, and so make the best use of its economic resources.

UNITED KINGDOM: ACHIEVEMENTS AND PROGRAMS²⁰

[Review of Period July 1945–December 1946]

General

(30) At the end of the war 42 per cent of the nation's manpower was in the Armed Forces or was directly engaged in supplying them. Only 2 per cent were producing exports and less than 8 per cent were providing and maintaining the nation's capital equipment. The nation's main task was to demobilise this war structure and to set the civilian economy moving.

(31) This has been done with very little dislocation. By the end of 1946, over 4¼ million men and women had been demobilised from the Forces. This, when balanced against the intake, has reduced the size of the Forces by nearly 3¾ million men and women; in addition, the number engaged in producing munitions was reduced by over 3¼ millions. The proportion of the nation's man-power in the Armed Forces or directly engaged in supplying them had fallen from 42 per cent to less than 10 per cent. In this process, the number of unemployed in Great Britain never exceeded 400,000 or 2½ per cent of the insured population; outside the Development Areas unemployment has not, in general, exceeded 1½ per cent.

(32) The total employed population at the end of 1946 was some 2 millions less than in June 1945, partly because women had left industry, partly because many demobilised men and women were still on release leave, and partly because there were more unemployed. But the total was still over 1 million greater than in June 1939, mainly because of the big fall in unemployment.

(33) The industrial distribution of this manpower is set out in Table A.²¹ The number in manufacturing industry and building is somewhat larger than it was before the war, but within this field there has been a very considerable switch from the textile and clothing industries to the metal and engineering industries; there is substantially more employment in agriculture, public utilities and transport, but less in mining. The increase in the total employed population and much of the additional manpower made available by a considerable reduction in

²⁰ *Economic Survey for 1947* (Cmd. 7046), pp. 9-16. The omitted parts (pp. 12-15) discuss the problems of capital equipment and maintenance and consumption. The latter was estimated at about 10 to 15 per cent below pre-war level (a more recent report put consumption substantially higher than this report); and savings and taxes used one-third of income as compared with one-sixth in the pre-war period.

²¹ Omitted here.

distribution and other consumers' services has been absorbed by the increase of the defence and public services.

(34) These changes resulted in a substantial expansion of the national production throughout 1946. This cannot yet be translated into precise terms of national income; the national income and expenditure figures for 1946 will be published as usual in the National Income White Paper which is issued at the time of the Budget. Nor is it possible to make a comprehensive comparison with pre-war. But in Table B an analysis is made of production in the fourth quarters of 1945 and 1946 and pre-war, for those items for which comparable figures are available.²² At the end of 1946:

(a) Production of coal (deep-mined and opencast) was 5 per cent above the level of a year ago and of gas and electricity about 15 per cent above end-1945. Gas production was about 30 per cent above 1938 and electricity production nearly 70 per cent above, but coal production was 18 per cent below 1938.

(b) The quantity of freight carried by the railways had fallen in the last year but was still of the order of 25 per cent more ton-miles a week than in 1938. There were about 20 per cent more goods vehicles on the road than pre-war.

(c) Steel production was as great as in previous peak years and, despite the lack of imports, steel consumption was higher than at any previous peace-time period. Consumption of non-ferrous metals (except for lead) had increased steadily since the last quarter of 1945, and was substantially above the pre-war level.

(d) The merchant shipbuilding industry was engaged to its full capacity, and employment was considerably greater than in 1938; the pre-war output of passenger cars had been nearly recovered and output of commercial vehicles had increased by 50 per cent above pre-war. Production of agricultural tractors had been maintained above the high levels reached during the war, and was more than double pre-war; in the last year output of agricultural machinery as a whole had increased by more than one-third.

(e) The output of certain building materials was still substantially less than pre-war; notably, brick production was only two-thirds of the 1938 level, although it had trebled in the last 12 months. Cement output, on the other hand, had practically recovered the pre-war level, and output of plasterboard had exceeded it.

(f) The number of new permanent houses completed had risen to 8,000 a month (plus 12,000 temporaries); the rate in 1937 and 1938 was 30,000 a month. But 200,000 houses were under construction at

²² Omitted here.

the end of 1946, and a vast amount of repair work was also being done.

(g) Production of cotton yarn, still 40 per cent below pre-war, had increased by 12 per cent in the last year; the woollen industry at the end of 1946 was absorbing raw material at a rate nearly 40 per cent above the previous year but nearly 20 per cent below pre-war; rayon yarn output increased by 30 per cent in 1946 and was 50 per cent above 1938.

(h) The agricultural output in 1946 was substantially below 1945, because of the bad harvest conditions. Production of cereals was nevertheless 50 per cent above pre-war, potatoes more than double, sugar-beet 28 per cent above pre-war and vegetables 30 per cent above pre-war. Milk output was 5 per cent above 1945, and 20 per cent above 1938; production of livestock products was about the same as in 1945 and greatly below pre-war; supplies of fish increased by two-thirds during 1946, and at the end of the year were above the pre-war level.

(35) This summary indicates how far the nation had got by the end of 1946 in the development of peace-time production. By the end of the year the rate of national output was probably not significantly below pre-war over the economy as a whole. This in itself imposes a heavy strain on our basic industries—and particularly on coal and power—which by the end of the year was becoming critical despite all the efforts which were made to strengthen them.

(36) However, this expression of production has given us a start with each of the tasks of reconstruction of the British economy—exports, industrial re-equipment, repair of war damage, housing, and an increased flow of consumer goods. The changes in manpower classified broadly according to the use made of its products are shown in Table C.²³

Imports and Exports

(37) The increased need for exports has been of first importance from the start. The development of our overseas economic position was set out in a previous White Paper embodying the statistical material presented during the Washington Negotiations (Cmd. 6707). We have lost gold and foreign investments and have incurred new debt to an extent which implies a worsening of our pre-war capital position in relation to the rest of the world by nearly £6,000 millions (this includes the full United States and Canadian credits, the need for which has arisen from the war). The loss of income from foreign investments which this has involved, and the loss of net shipping income, and the reduction in

²³ Omitted here.

our export trade to a level considerably short of 50 per cent of pre-war volume at the end of the war, left us in a highly dangerous trade position. Our income from exports at the end of the war, indeed, was enough to finance only one-quarter of our pre-war volume of imports. The first need was a rapid expansion of our export trade in order to buy the food and raw materials which we needed from abroad.

(38) Particular priority was therefore given to exports, even of products for which there was a pressing need at home. This has been, and will continue to be, necessary, for without these exports we cannot afford the imported supplies which we must have. Our exports expanded very satisfactorily; at the same time, imports did not rise as fast as had been expected, for we had to contend with serious world shortages of food and raw materials. The volume of our imports and exports—as shown by index-numbers representing the quantity of our imports and exports allowing for changes in prices—developed as follows:

VOLUME OF IMPORTS AND EXPORTS

(1938 = 100)

	<i>Exports</i>	<i>Imports</i>
1945—		
3rd quarter	46.2	61.7
4th quarter	55.8	53.0
1946—		
1st quarter	84.2	63.2
2nd quarter	98.0	68.7
3rd quarter	104.3	70.1
4th quarter	111.2	72.2

(39) At the time of the Loan negotiations in Washington, it was estimated that our adverse balance in 1946 would be about £750 millions. The export drive developed faster than had been expected when these estimates were made, and imports fell below earlier expectations, so the deficit for 1946 is now estimated at around £450 millions. Full balance of payments figures for 1946 will be published in the National Income White Paper next April, but the following very provisional figures illustrate the position:²⁴

(40) This deficit of £450 millions in 1946 has been covered mainly by drawings of \$600 millions (£150 millions) on the United States and of \$540 millions (£130 millions) on the Canadian credits.

(41) Our balance of payments in 1946 has been more favourable than expected. But this is largely because we have been unable to obtain all the food and raw materials that we need. Moreover, during 1946 as a whole, the rate of expansion of our exports has been no more than

²⁴ See p. 198.

	1938	1946
	(£ millions)	
Payments—		
For imports (f.o.b.)	826	1,100
Net overseas Government expenditure	13	300
	<hr/> 839	<hr/> 1,400
Receipts—		
From exports and re-exports (f.o.b.)	533	900
From interest, profits and dividends ²⁵	175	60
From other sources (net)	61	— 10
	<hr/> 769	<hr/> 950
Deficit	<hr/> 70	<hr/> 450

enough to balance the rate of expansion of our imports. At the end of 1946, exports were running at 110-115 per cent of pre-war volume; but these exports, together with our invisible exports, were not enough to pay for imports even at 70-75 per cent of 1938 volume.²⁶

The Eighteen Months' Results

(58) On a broad view of the last eighteen months, the result has been that:

(a) The defence sector (armed forces and munitions) has been cut to a little over one-fifth of its size at the end of the war.

(b) Exports have expanded to 110-115 per cent of 1938 volume, an amount still insufficient to pay for imports at 70-75 per cent of 1938 volume.

(c) A normal pre-war year's work of industrial equipment and maintenance has been done in 1946.

(d) Homes have been provided, by new building and repair, for nearly 300,000 families, and the way has been cleared for as fast an expansion in house-building as the material supplies will permit.

(e) There has been little change on balance in food consumption, but a considerable expansion in supplies of manufactured goods to the home civilian market, to levels ranging from two-thirds to over 100 per cent of pre-war.

(59) This is the way in which the national resources have been used in 1946. In certain respects, the general balance has not been unsatisfactory. A beginning has been made with each of the major objectives of reconstruction. By the end of the year, the change-over to civil pro-

²⁵ Excluding oil, shipping, insurance.

²⁶ Paragraphs 42-57 omitted.

duction was well on the way to completion. Aided by a favourable record of industrial peace, a high level of industrial activity has been achieved.

(60) The expansion of production and consumption throughout 1946 put a heavy strain in particular upon coal and power supplies, but also upon steel, transport, and other basic industries and services. Coal production in the year as a whole exceeded the production of 1945 by 3.6 per cent. But it did not grow nearly fast enough to match the growing consumption as the conversion of industry and the restoration of the civil economy got under way. The by no means unfavourable industrial results for 1946 were achieved only by a draft of 5 million tons on coal stocks. In a sense, indeed, we have been living on a coal overdraft. The demand for power likewise exceeded the capacity of the power stations; the demand for transport was up to the limit of what could be carried by the railways' depleted rolling-stock; the demand for steel was more than could be produced or imported. Indeed, our basic industries and services were limiting the nation's productive effort. By the end of 1946 we had reached a stage at which further expansion of our productive effort was vitally necessary, but was extremely difficult unless industry could obtain more coal and power.

United Kingdom: The Situation in 1947²⁷

General

(61) The central fact of 1947 is that we have not enough resources to do all that we want to do. We have barely enough to do all that we *must* do. Whether we reckon in man-power, coal, electricity, steel, or national production as a whole, the conclusion is unavoidable. To get all we want, production would have to be increased by at least 25 per cent. This is clearly impossible in 1947.

(62) There is no reason for surprise about this. We have come through six years of all-out effort. We lost less men than some of our Allies; we were saved from enemy occupation. But our losses, though less obvious, are very real, and are now making themselves felt—first, in our import-export problem and, second, in the need for rebuilding our basic industries. We must find means to pay for imports which we formerly got in return for our overseas investments, and we must make up six years' arrears of industrial equipment. These are basic things, and

²⁷ *Economic Survey for 1947* (Cm. 7046), pp. 16-32. The omitted parts (pp. 20-26) discuss the more significant bottlenecks, in particular coal, power, steel, railways and shipping, agriculture, and building. In the omitted sections the government especially emphasizes the interrelation of the effect of coal shortage on iron and steel, railways and shipping, and the need of postponing projects which will germinate many years from now; the crisis is a current one and the economy must be salvaged today if there is to be a tomorrow.

to put them right is a huge job of work—especially as we must at the same time rebuild our battered housing, restore our depleted flocks and herds and produce more clothing and household goods.

(63) We could live without new radio sets and furniture, but we cannot live without imported food. We could indeed at a pinch live without new houses and holidays, but our national existence becomes quite impossible if we cannot produce enough coal and electric power.

(64) Those things which are fundamental to our national life must come first. The danger in our present situation is that there is so much that we want to do, and so much that seems important that too little effort will be concentrated on the things that are really vital.

(65) The government has examined the national needs for 1947, and has decided that first importance must be attached to payment for imports and to basic industries and services, particularly coal and power. These requirements are explained below, and are then related to the government's general plan for the lay-out of our national resources in 1947, which is a series of practical targets, in some cases expressed in man-power, and in others in terms of production. The government intends to discuss the implications of the plan with the representatives of both sides of industry in order to develop the best possible means of carrying it out. This Paper does not go into detail industry by industry. Its purpose is to give the broad pattern of national work at which the government considers the nation should aim. It is a framework, not a blueprint.

Imports and Exports

(66) Imports and exports are of fundamental importance, now and for some years to come. Failure to build up our export trade in the next two or three years so that we can afford to buy enough imports would mean continued food rationing, much less smoking and private motoring, widespread unemployment for lack of raw materials and inability to re-equip industry with the most modern machinery.

(67) We need more imports in 1947. In the last year we have been getting 70 per cent of the 1938 quantities, and have had to draw on stocks. The 1947 import programme provides an expansion to 80-85 per cent of 1938 volume. But much more than that would be needed to increase rations considerably.

(68) Our imports are limited both by what is available and by what we can afford in foreign exchange. At present, our imports of food (up to the requirements for a certain basic consumption level), feeding-stuffs and essential raw materials are limited primarily by world shortages. Our imports of additional food beyond the basic level, tobacco, petrol and consumer goods are determined by what we can afford. Both considerations affect our imports of machinery and equipment for in-

dustry, agriculture, mining, shipping, &c., but normally import is permitted if the machine is of essential importance and cannot be supplied in comparable conditions from United Kingdom production. As world supplies improve, our imports will be fixed entirely by what we can afford. We must continue to control their total volume tightly.

[The Programme for 1947]

(69) The 1947 import programme is as follows:—

	<i>£ millions (f.o.b.)</i>
Food and supplies for agriculture	725
Raw materials and supplies for industry	525
Machinery and equipment (including ships)	60
Petroleum products	55
Tobacco	50
Consumer goods	35
	<hr/>
Total	1,450 ^a

This is not a forecast. The programme is continuously changing with supply conditions and prices; the figures above show the pattern to which the importing Government Departments are now working. The substantial expansion over 1946 reflects both increased quantities and increased prices. Growth of imports on this scale involves risks. But when supplies of so many essential food-stuffs and materials are unobtainable, it would be unwise to create further shortages by stringent import restrictions.

(70) There are other claims upon our foreign exchange resources. The expenditure abroad of the Armed Forces; our share of the cost of Germany; expenditure on relief; advances for rehabilitation; grants for Colonial development and welfare—all these, like imports, must be paid for by exports. Likewise, government receipts from claims arising out of the war, sales of surplus military stores abroad, &c., earn us foreign exchange. The excess of government overseas expenditure over government receipts from overseas may be of the order of £175 millions in 1947, but much of the expenditure and receipts depends upon happenings throughout the world which are outside the control of the government; any figure is therefore a very broad estimate at this stage.

(71) We expect to have to find in all some £1,625 millions of foreign exchange in 1947—£1,450 millions for imports and £175 millions for net overseas government expenditure. This must be covered by our exports and re-exports, by our invisible income, or by borrowing from abroad. For reasons explained below, the government considers that it would be unsafe to plan in 1947 to borrow more than £350 millions net.

^a Estimated film remittances of £18 millions are debited against net invisible income in paragraph 71.

Our net invisible income may yield £75 millions. This leaves £1,200 millions to be provided by receipts from exports and re-exports.

(72) Our exports and re-exports in the latter part of 1946 were running at a rate of about £1,100 millions a year. We cannot now expect an expansion in the first half of 1947. This is all the more reason why a strong effort must be made to recapture the lost ground and to bring about a substantial recovery in the second half of 1947. Otherwise we shall be faced with the inescapable alternatives of cutting down our essential imports or drawing dangerously fast upon the United States and Canadian credits. We must enter 1948 with a much narrower gap between our imports and our exports than there will be in the year 1947 as a whole. The government has, therefore, set an export target of 140 per cent of the 1938 volume to be reached by the end of 1947 as against the end-1946 level of 110-115 per cent of 1938.

(73) Export targets are being worked out for the individual industries to correspond with the global target, and will be discussed with them shortly. It will be extremely difficult to achieve this target. This year, we cannot export coal. In order to get the total volume of exports up to 140 per cent of the 1938 level by the end of 1947, the volume of exports of manufactured goods must therefore rise to about 165 per cent of the 1938 level. Our exports of steel and cotton textiles will not expand further this year. Special reliance must therefore be placed upon a further substantial growth of engineering, vehicle, chemical and miscellaneous exports.

(74) The labour force in manufacturing industry already employed on orders for export is about 50 per cent above the pre-war level and is capable of further expansion provided that fuel and power supplies are adequate. But these export targets will not be achieved at all readily, and in some cases it will be impossible to meet them without a reduction in the amount of production available for the home market.

[The Dollar Problem]

(75) This lay-out of imports and exports ends with a prospective deficit of £350 millions to be met by borrowing from abroad. This is itself considerable alongside the £955 millions remaining of the United States and Canadian credits at the beginning of the year. But the drain upon these credits in 1947 threatens to be much larger than this. After the middle of this year our convertibility obligations under the Anglo-American Financial Agreement may result in some loss of dollars.

(76) Moreover, our dollar position is much more difficult than would appear from our total balance of payments. We are now drawing some 42 per cent of our imports from the Western Hemisphere, which is now the main source of the food and raw materials that we must have. But we are selling there only 14 per cent of our exports. We are thus

running large deficits with these countries. These must be settled in dollars or their equivalent. To much of the Eastern Hemisphere, on the other hand, we tend to sell more than we buy. In a world fully recovered from war, this would provide us with the means to settle our deficits with the West. But how many of the Eastern Hemisphere countries have no gold or dollars or essential goods with which to pay; to others we owe large debts which we shall have to repay gradually, and the surplus in our trade with such countries is used up in this way. We, therefore, shall not be able wholly to use our surpluses with Eastern Hemisphere countries against our deficits with Western Hemisphere countries. To the extent that this occurs, the drain on our dollars will exceed the total deficit of £350 millions.

(77) This dollar problem within our total balance of payments can be wholly solved only by the economic recovery of Europe and the Far East and the establishment of equilibrium in all the major trading countries' balances of payments. The first is necessary to enable us to adjust the present distortion in the source of supply of our essential imports. Both are necessary to enable the Eastern Hemisphere countries to make their currencies convertible and so allow us to use our surpluses with them in order to match our deficits with the West.

(78) The United States and Canadian credits must last us not only until we have ourselves established a stable balance of payments and are exporting as much as we import; they must last until this special dollar problem is also solved. No one can predict how long this will be. But we certainly cannot assume that world recovery will be rapid enough to provide a quick answer to our difficulties.

[Targets for the Future]

(79) Four conclusions follow for 1947:

(a) the export target of 140 per cent of 1938 volume by the end of the year is of prime importance;

(b) exports to the Western Hemisphere (and some European countries with which we have deficits, viz., Sweden, Switzerland, Portugal) are of particular importance, for they earn dollars or the equivalent and pay for our essential imports from those countries;

(c) close import control must be maintained, particularly of products which come predominantly from the Western Hemisphere;

(d) home production must be increased along lines which contribute to these policies; agriculture and shipping are of major importance for this (see paragraphs 104-110).²⁰

(80) In the longer view, it is abundantly clear that a further expansion, both of imports and of exports, will be needed. The long-term

²⁰ Omitted here.

target for exports still stands at 175 per cent of 1938 volume. The exact increase of exports required will in the long run depend upon the relative prices of imported foods and raw materials and exported manufactures. But it is clear that a very large increase will be needed. The difficulty of maintaining exports on this scale, year in and year out, is entirely insoluble unless British industry is able to compete in quality, price and design throughout the entire range of manufactured goods. Quality, price and design will be of crucial importance when the sellers' market becomes a buyers' market and we have to face keen competition everywhere.

(81) The basic fact of our position over the next few years, and indeed in the longer-term future, is that we must devote at least 25 per cent of our manufacturing capacity to the production of exports. This means a smaller supply for the home market, unless production is increased. We shall indeed require to export more than this if we are to get the imports which we need for improving our standards of living. But 25 per cent of our production of manufactured goods must be a first charge. A large part of our production is exclusively for the home market; this means that the industries which can export will have to plan for a much larger long-term export proportion than 25 per cent and a far larger proportion than they devoted to exports before the war. There is nothing temporary about our need for exports; concentration upon exports must become a permanent part of our normal industrial life. Without exports, we cannot get food and we cannot get raw materials, and without these, we cannot hope to increase our standard of living—or even maintain it.³⁰

The Objectives for 1947

(118) Having examined our economy as a whole, the government has sought to frame a balanced series of objectives for 1947. They are:

(a) *Defence*. The nation's defence needs are examined in a separate White Paper (Cmd. 7042). This provides for a reduction in the Armed Forces from the December 1946 level of 1,427,000 to 1,087,000 by the end of March 1948 and a fall in the numbers of workers needed for supplying them.

(b) *Payment for Imports*. Exports must be raised to 140 per cent of 1938 volume by the end of 1947 (paragraph 79).

(c) *Capital Equipment and Maintenance*. The housing programme is 240,000 new permanent houses and 60,000 temporary houses in 1947, as explained in the Housing White Paper (Cmd. 7021). The amount of capital equipment and maintenance work (other than

³⁰ Paragraphs 82-117 omitted here.

work on houses) is to exceed that of a normal pre-war year by at least 15 per cent. (paragraph 117).³¹

(d) *Consumption*. Food supplies will not increase much in 1947, because of world shortages. The shortage of the most important manufactured consumer goods such as clothing and household textiles, pottery and furniture, will necessarily continue. A steady effort must be made to increase supplies, but progress will inevitably be patchy, and will depend mainly upon the extent of the fuel and labour shortages in the various industries which produce these goods.

(e) *Public Service*. Programmes for education, public health and national insurance are to go forward, and a proper degree of efficiency of the public services is to be maintained, with special attention to economy in manpower.

(119) The achievement of all of these objectives depends upon the basic industries and services, and in particular coal, power, steel and transport. Failure in any of these—and particularly failure to produce 200 million tons of coal in 1947—will set back the entire productive effort. Indeed, the possibility of securing these objectives depends upon the effort of the miners. They are difficult objectives. They call for a rapid recovery from the present industrial standstill, and then a sustained expansion for the rest of the year. This will not be at all easy. But the objectives are very modest in relation to the nation's needs. We cannot afford to fail on any of them. And they all depend upon coal.

[Manpower]

(120) In order to reach these objectives—and at present output per man-year—we shall require a larger labour force than can be expected to be available unless special measures are taken to increase it. Moreover, the present distribution of the labour force, by industries and by places, is not satisfactory; a wide range of industries are under-manned, while others are getting too much manpower in relation to the raw materials available; in Wales, unemployment before the power crisis was 7½ per cent, while in London and the Midlands it was 1 per cent, and the number of new vacancies notified to the Labour Exchanges every week far exceeded any possibility of filling them. We have to look at the problem both in terms of total manpower and in terms of its distribution.

(121) The labour force in civil employment at the end of 1946 was 18,122,000. Unless special measures are taken to increase it, this force is unlikely to exceed 18,300,000 in 1947. It will reach this level at about the middle of the year. In terms of total manpower, the gains to civil

³¹ Omitted here.

employment from subsequent demobilisation will be offset by the raising of the school-leaving age and other losses to the labour force.

(122) It would be possible, by delaying the raising of the school-leaving age a few months, to give the productive system an additional 160,000 juveniles. The government has decided that the long-term loss to the nation would outweigh the immediate gain from this step; the education of children of this age suffered severely in the war and their interests—and the long-term interests of the nation—cannot be sacrificed.

(123) For the purpose of estimation, the government has assumed that unemployment at the end of 1947 will be 400,000, or $2\frac{1}{2}$ per cent of the insured population. In the Development Areas, where unemployment results from the fact that there are not enough factories, the percentage will be higher than this. The cost to the nation in 1947 of this legacy from the past of unbalanced geographical distribution of our industry is equivalent to the loss of the labour of 120,000 men throughout the year. The government is taking energetic steps to remedy this state of affairs by building new factories, and there is every reason to hope that unemployment in these areas will be appreciably less at the end of 1947 than it is now. But until the new factories have come into full operation, unemployment in the Development Areas will nevertheless be well above the rate in the rest of the country.

(124) The prospective labour force of 18,300,000 men and women at December 1947 falls substantially short of what is needed to reach the national objectives. The government therefore appeals to women who are in the position to do so to enter industry. By doing so they will actively help in the national effort. This applies in particular to those who enter the under-manned industries such as textiles. To encourage this, these industries will need to adjust their conditions of work to suit, so far as possible, the convenience of women with household responsibilities and to accept, as they did in the war, the services of women on a part-time basis.²² The government also appeals to those who can do so to contribute to the national task by staying on at their work instead of retiring. It is to encourage this that the pensions arrangements provided in the National Insurance Act offer special inducements to old people to postpone retirement, and it would be generally desirable if other pensions schemes which make retirement compulsory at a specified age were amended so as to allow retirement to be postponed, with some suitable improvement in the rate of pension. This need to increase the working population is not temporary; it is a permanent feature of our national life.

(125) Foreign labour can make a useful contribution to our needs.

²² The Ministry of Labour will give information locally where and when part-time workers are needed.

The old arguments against foreign labour are no longer valid. There is no danger for years to come that foreign labour will rob British workers of their jobs. The government intends to seek every means of employing in civilian work the Poles who are here or who are coming here and who are unwilling to return to their own country. It also intends to extend the recruitment of displaced persons from the Continent to work here. The government is prepared to ensure that foreign labour will not be introduced into specific employment while British labour is available. The recruitment of displaced persons for industrial employment is obviously limited by their suitability for work of the kind for which British workers are not available, by their ignorance of the English language and above all by the serious difficulty of finding accommodation for them, particularly if they are accompanied by dependents. But foreign labour is the only substantial additional source of manpower which is open to us—especially for the under-manned industries—and the government intends and believes that with the full co-operation of British employers and workers these difficulties can be overcome.

(126) The government is planning on the basis of at least an additional 100,000 workers from all these sources by the end of 1947, giving a prospective total civil employment of 18,400,000.

[Distribution of Workers]

(127) There is also the problem of getting this manpower into the right places. Expansion of the coal-mining labour force is priority number one. The next greatest need is for an expansion of the other under-manned industries, and particularly of agriculture and the textile industries. Employment in the metal-using industries is already far in excess of the pre-war level and should not be expanded further, except in certain special instances. The building labour force should, likewise, not be expanded much further, but more workers are needed to produce building materials. Although consumers' services, such as distribution, catering, entertainment, &c., are still well below their pre-war level, they are tending to attract too much of the manpower that is becoming available as the result of demobilisation, and it is of the utmost importance that only moderate increases should occur in these services in the immediate future.

(128) The government has no direct control over the way in which manpower moves; it can seek to influence the movement in a number of ways, but the ideal distribution of manpower would involve changes of such magnitude that it would be impossible to bring them about by any means short of complete war-time direction. Even if direction were used, the transfer of labour would be limited by lack of accommodation. The following table sets out a distribution of manpower at end-1947. This is neither an ideal distribution nor a forecast of what will happen; it repre-

sents the approximate distribution which is needed to carry out the objectives in paragraph 118 and which the government considers can be achieved if the nation as a whole sets itself to achieve them.

DISTRIBUTION OF MANPOWER³³

	<i>(Thousands)</i>	
	<i>Dec. 1946</i>	<i>Dec. 1947</i>
Coal industry ³⁴	730	770
Public utilities	258	275
Transport	1,373	1,370
Agriculture and fishing	1,081	1,120
Building and civil engineering ³⁵	1,250	1,300
Building materials and equipment	628	650
Metals and engineering	2,811	2,840
Textiles and clothing	1,405	1,475
Other manufactures	2,186	2,225
Distribution and consumers' services	4,270	4,325
Public service ³⁶	2,130	2,050
Total civil employment	<u>18,122</u>	<u>18,400</u>

(129) The main considerations underlying this distribution are:

(a) Special importance and difficulty attach to coal-mining, agriculture, public utilities; the high rate of loss of men from the mines makes even a small increase of the existing manpower an extremely difficult target.

(b) It is desirable that further immediate expansion of the building labour force should be limited because of shortage of timber and other materials; special effort will be needed to meet the target for building materials.

(c) It is desirable that further expansion of the engineering and other metal-using industries should be limited, not only because the workers are needed elsewhere, but also because shortage of steel and certain non-ferrous metals will in any case limit additional useful employment in these industries.

(d) Employment in textiles and clothing is still 400,000 below pre-war. The proposed increase is as much as can be expected in one year.

³³ Definitions as in Table A (omitted here).

³⁴ Includes administrative and all other workers engaged in the industry. The number of wage-earners on colliery books was 692,000 at December 1946, and the target is to raise this to 730,000 at December 1947.

³⁵ Includes all workers in the industry. The number of male operatives aged 16 and over was 943,000 at December 1946, and the target for December 1947 is 1,000,000.

³⁶ National and local government, including Post Office, Fire Service and Police.

(e) It is desirable that the expansion of the labour force engaged in transport, distribution and consumers' services should as far as possible be limited.

(f) A reduction is assumed in the numbers employed in national and local government; a thorough review is now taking place.

(130) Balanced national production requires a big increase in the labour force of some industries and limitation of the expansion of others. The need for more miners dominates the whole scene. Our food position depends upon more workers in agriculture. The housing programme depends upon more workers in the building materials industries, as well as upon timber. The clothing ration depends upon more workers in the cotton and woollen industries; the supply of cups and saucers upon more workers in the pottery industry. On the other hand, further expansion in the number of building workers, or in the number of engineering workers, would threaten to cause under-employment for lack of materials.

(131) Now that direction of labour has been abandoned, there is no single measure which the government can adopt to bring about these adjustments. The problem of certain under-manned industries can be greatly eased by the introduction of new machinery and by the provision of better amenities for the workers in them. As much as possible is being done on these lines. But these are for the most part measures which cannot yield quick results.

[Output per Man-Year]

(132) The size and the distribution of the labour force are important, but what ultimately counts is the output which the nation produces. We shall not attain the objectives described in paragraph 118 without an increase of output per man year. In coal and in building, as shown above, output per man-year is far below pre-war; in agriculture, on the other hand, it is appreciably above pre-war. In manufacturing industry the evidence is not clear; the experience of different industries—and probably of different firms in the same industry—varies widely. The absence of precise facts on this vital question seriously hinders remedial action. The government therefore proposes to invite the representative organisations of industry to co-operate with it in an attempt to establish the facts, now that the first stages of the reconversion have been completed.

(133) It is clear, however, that there is room for improvement, and that a relatively small improvement all round can have a big effect upon the total national production. In the longer view, increased output per man-year is the *only* way to expand production and the standard of living. The way to effect this is by the organised combined effort of men, management and machines. Our record of industrial peace since the end of the war is one of which we can be proud. But more is called for than

the absence of industrial unrest. It is necessary to build up the factories into productive units of the highest efficiency. This is a matter in which the government is giving industry what assistance it can. With this direct object, it has allocated large resources to industrial equipment and maintenance work in 1947 and is ready to make foreign exchange available for imports of machinery which increase efficiency. But the job must mainly be one for industry itself.

(134) For this purpose also, the government attaches great importance to the introduction of systems of payment and other arrangements which provide the maximum incentive to increase output.

(135) Over a wide range of the nation's economic activity—transport, distribution, and services generally—the idea of output per man-year is less precise than in industry, where it can be measured in terms of the number of things produced. But the need for the greatest possible efficiency and economy in the use of manpower in these services is no less than in manufacturing industry, mining, building and agriculture. The claim which the services make upon the nation's manpower must be kept as small as possible, in order that manpower should be available for the production of goods. Increased efficiency in the supply of services is just as important as increased output per man-year in the production of goods.

(136) In considering the grave problems presented by the economic "budgets" of requirements and resources, the government has fixed national objectives which cannot be achieved without an increase in output per man-year. Action which serves to reduce output per man-year in any industry is directly endangering the attainment of these objectives. The nation cannot afford shorter hours of work unless these can be shown to increase output per man-year. Greater leisure is a very desirable thing, but it is not at the moment a prime essential like imported food. It is not as important as coal or clothing or housing.

[The Distribution of Resources]

(137) If the objectives are reached, the national production will reach a high level in 1947, despite the coal crisis. The approximate distribution of the national income might be summarised as follows: (p. 211).

(138) This table shows the broad distribution of national effort at which the government is aiming in 1947. It indicates the relationship between the various targets in total terms of national work—the high level of industrial re-equipment and building work which must be done, the increased exports which are needed to offset our loss of other overseas income, the growth in defence and public service compared with pre-war, the proportion devoted to personal consumption about midway between the last pre-war year and the last war year. This is the broad

	<i>Percentage of National Income</i>		
	<i>1938</i>	<i>1945</i>	<i>1947</i>
Personal consumption	78	54	66½
Defence ²⁷	7	49	11
Other public expenditure	10	7	13½
Capital equipment and maintenance	16½	6	20
Less depreciation	-10	-6	-7
Imports	-18	-10½	-17
Exports and re-exports	11½	4½	14
Other net overseas receipts	5	-4	-1
Total	100	100	100

layout. It shows how the results of the national productive effort are distributed between the various national needs. But the bigger the total production, the larger the amount available to be distributed.

Conclusion

(139) In this Paper the government has set out its conclusions on the economic state of the nation and has fixed targets and objectives for 1947. The central problem is coal and power and upon this everything else depends. The second problem is to expand the nation's labour force, to increase its output per man-year and, above all, to get men and women where they are needed most. These are essentials for increased national production. Next is the problem of payment for our imports and the necessary condition here is a steady recovery of our exports towards the target level of 140 per cent of 1938 volume which must be reached by the end of the year. Unless we concentrate upon these really important things we may never restore the foundations of our national life. The objectives in this Paper embody the government's determination to put first things first.

(140) It is the government's responsibility to lay down the national tasks, and to use all means at its disposal to ensure that they are accomplished. But the government cannot achieve them by itself. The tasks are for the nation as a whole, and only the combined efforts of everyone can carry them through. The government therefore invites the attention of industry and the public to its plans; it intends to arrange discussion with both sides of each industry of the problems which arise from them; it will welcome constructive criticism, and it is ready to modify its plans if a case for doing so is made out. There is nothing rigid or final in these plans; they are a working pattern for the nation which will be adapted and modified as conditions require and as experience shows necessary.

²⁷ The defence figure for 1947 represents gross cost of the Services; sales of surplus military stores are credited against other items in the table.

(141) These plans call for a great constructive effort by all the British people. This is a critical moment in our affairs. Success demands effort and, even more, a constructive and flexible approach by both sides of industry to the problem of production. There is now no place for industrial arrangements which restrict production, prices or employment. Such regulations and traditions grew up as a means of protecting those engaged in industry from the effects of a shortage of work and of empty order books. But now there is no such shortage, nor need there ever be under a policy of full employment. There is more than enough work for industry to do. There is so much to be done, indeed, that the government's main difficulty is that of ensuring that what is needed most is done first. Against this background there is no justification for action by either side of industry which limits production. On the other hand, if the entire strength of industry—mining, manufacture, building, agriculture and services—is whole-heartedly exerted for the attainment of the objectives set out in this Paper, the government is confident that our present difficulties will be overcome and that we shall succeed in carrying out the great tasks before us.

United Kingdom ³⁸

Prefatory

6. The Long-Term Programme submitted by the United Kingdom sets out the general policies which the United Kingdom proposes to follow so far as can be seen at present in order to establish not later than the middle of 1952 an equilibrium in its balance of payments at a level consistent with the full employment of its resources. When these individual programmes were drawn up, no country knew what the other countries' programmes were. The next step, therefore, is for each participating country to review its programme in the light of those of the other countries and it is to be expected that in the result the countries will need to modify their programmes in order to develop them into a joint recovery programme. For this reason the present programmes have a particularly provisional character.

7. Any programme of economic planning must be in the nature of a broad strategical plan sufficiently flexible to meet unpredictable and rapidly changing events. It is not possible to establish firm and definite plans which would bind the United Kingdom economy to a pre-determined course of action so far ahead as 1952-53 or even eighteen months hence. Certain elements in both the Long Term and the 1949-50

³⁸ *European Co-operation*. Memorandum submitted to the Organisation for European Economic Co-operation relating to Economic Affairs in the period 1949 to 1953 (Cmd. 7572, Dec. 1948), pp. vi, 1-9, 45-46.

Programmes—viz., those relating to major home production and investment plans—are more firmly based than those which are more directly dependent on developments in the rest of the world. But neither programme is intended as a detailed forecast of what will actually happen. The United Kingdom national programmes set out to define the general objectives which the country will seek to follow. No other method of programming is possible in a democratic community. For, quite apart from the unpredictable impact of external events, policies can be fulfilled only if they gain the voluntary co-operation of the people as groups and as individuals.

8. For this reason the statistical basis of both Programmes, particularly in the balance of payments field, is very much less precise than the nature of the tables would imply. Detailed conclusions cannot be drawn from these forward estimates about the pattern of the standard of living to be attained or about the exact distribution of production at home or of our trade overseas. The figures are illustrative of the nature and relative scale of the problems that on present evidence seem likely to arise, the possible solutions, and the points upon which special effort will have to be concentrated.

9. Progress towards our objectives is essentially a continuous process of attack on a succession of individual problems and of adjustments to ever-changing conditions. These programmes will be kept continuously under review in O.E.E.C.³⁹ in the light of developments both in this country and in the world generally. His Majesty's Government will continue to maintain close touch with other countries of the Commonwealth on these matters. The co-operative work of forward programming cannot be expected to produce at any point a single master plan which could be looked upon in any sense as final, but it can lead to common action to solve the economic problems that can now be revealed and examined through the new machinery of the O.E.E.C.

The Long Term Programme of the United Kingdom

*Material submitted by the United Kingdom to the
Organisation for European Economic Co-operation
on the 1st October, 1948*

CHAPTER I.—INTRODUCTORY

(1) *The General Objectives*

It is the purpose of this Long-Term Programme to describe in some detail the policies which the United Kingdom proposes to follow in order

³⁹ Organization for European Economic Co-operation.

to "achieve and maintain a satisfactory level of economic activity without extraordinary outside assistance" by 1952-53. Alone and unaided the United Kingdom could not succeed in this endeavour; strengthened by its close contacts with the other members of the Commonwealth, in co-operation with the other participating countries of Western Europe and aided by the generous assistance afforded by the United States under the European Recovery Programme, it is confident of success. As means to this end, the United Kingdom has undertaken in common with the other participating countries to make the fullest use of productive resources, to increase production, to develop and modernise industrial and agricultural equipment, to maintain the stability of its economy, to expand trade and to join in measures to reduce the barriers obstructing it.

2. The Government must give a clear guide as to the direction and intensity of the sustained and strenuous efforts which will be needed to reach these objectives. In present conditions, the quasi-automatic operation of economic forces could not produce the right results or produce them with immense social upheaval. But large-scale and long-term economic planning in time of peace is a novel field for Government initiative in democratic communities. Moreover, it must never be overlooked that for a democracy economic planning is a means to an end and not an end in itself.

3. Economic planning in the United Kingdom is based upon three fundamental facts; the economic fact that the United Kingdom economy must be heavily dependent upon international trade; the political fact that it is and intends to remain a democratic nation with a high degree of individual liberty; and the administrative fact that no economic planning body can be aware (or indeed ever could be aware) of more than the very general trends of future economic developments. Many of the assumptions about the future on which plans must be based are profoundly uncertain and many economic events are wholly outside the control of any one nation; many can only be partially influenced by international agreements, and those such as the effect of weather on the crops are beyond human control. Even in purely domestic economic matters the means of control which can be effectively used within a democracy are limited. Underlying economic uncertainties there is the factor of political stability in the world at large.

4. It is nevertheless essential to prepare long-term forward programmes in those fields of economic activity in which substantial changes will have to be made if the United Kingdom is to overcome those difficulties which lie within its own power, and to play its full share in the combined task before the O.E.E.C. countries as a whole. To follow any other course would be to jeopardise all hope of recovery. But the uncertainty which necessarily attends the future makes it essential that

many of the long-term plans must be kept flexible. A persistent adherence to targets or timetables based on assumptions which have been falsified by events might well be as disastrous as leaving the whole matter to chance.

5. For a nation with an open economy like the United Kingdom, the assumptions and forecasts underlying long-term plans are largely assumptions and forecasts about events overseas and these plans cannot be effectively prepared in isolation in its own capital. They need to be formulated and kept under review in collaboration with countries overseas, and especially, in this case, with the other parts of the Commonwealth, with the countries of O.E.E.C., and with the United States. Such consultation will narrow the range of uncertainty about future developments and thus enable the plans to be made more precise and realistic. Still more, it will allow both the plans of the United Kingdom and the plans of other nations to be modified by agreement to mutual advantage. The benefits of a world-wide division of labour must be secured. Until these possibilities are explored, the plans must remain provisional.

6. Finally, recovery must not be bought at the price of arbitrary and excessive interference with the rights of the individual. The United Kingdom intends to make resolute use of its traditional techniques of financial policy and of the direct public control of certain basic industries. A large measure of control will have to be retained over imports, over the total amount of home consumption, and over the scale and composition of investment. But powers of prohibition and compulsion, though they must be used to set limits to economic freedom, must not be allowed except in very special circumstances to infringe the personal freedom of the individual. The execution, as well as the preparation, of plans must be based upon the willing co-operation and understanding of the general public.

7. For the United Kingdom, therefore, a long-term plan can be no more and no less than a statement of economic strategy. It will not attempt to be a complete and rigid set of instructions for several years ahead. Certain of its parts will be worked out in detail, but its main purpose will be to provide the framework within which more precise short-term plans can subsequently be worked out. The practice of preparing annual programmes has already been established in the United Kingdom and this system has been adapted to the needs and opportunities of the European Recovery Programme in the programmes submitted for 1948-49 and 1949-50. These annual programmes are the necessary instruments with which the broad strategic plans contained in the Long-Term Programme will be given precise content. The United Kingdom hopes, therefore, that the joint discussion and revision of this draft of its Long-Term Programme, side by side with the programmes of the other countries of O.E.E.C., will result in a joint programme and a set

of national programmes that will be clear and effective guides in the preparation of detailed plans in the coming years.

(2) *The Problem Before the United Kingdom*

8. The crucial immediate problem for the United Kingdom, as for all member nations of the O.E.E.C., is the balance of payments. In some respects, however, the United Kingdom's problem differs from that which faces Europe as a whole.

9. For Europe as a whole in 1947 imports had increased and exports decreased by comparison with 1938; net incomes from shipping and investment had fallen and the world rise in prices had enormously enhanced the monetary measure of the increased deficit. These changes were accompanied by very large structural changes in the pattern of intra-European trade and payments.

10. By contrast the United Kingdom by 1947 had already increased the volume of visible exports to 9 per cent. above 1938; and visible imports were kept 20-25 per cent. below the 1938 level, despite the greatly increased volume of employment and output. Though the terms of trade were 15 per cent. worse than in 1938—in contrast with the experience of most other O.E.E.C. countries—the proceeds of exports paid for a far greater proportion of imports than in 1938. This was a great achievement; but it was more than offset by the loss of investment revenue, and by the increase in necessary Government overseas expenditure caused by the aftermath of war. The result was a current deficit of £630 million in 1947 compared with only some £70 million in 1938. The figures are summarised in the following table:—

	<i>(£ million at current prices)</i>	
	<i>1938</i>	<i>1947</i>
Total Payments for Imports (f.o.b.)	835	1,540
Receipts for Exports and Re-exports	533	1,102
Deficit on Visible trade	—302	—438
Invisibles (Net)	+232	—192
Total Deficit	—70	—630

11. The deficit in 1947 was due wholly to a deficit with the Western Hemisphere of £670 million (\$2,700 million); with the remainder of the world the United Kingdom had, in fact, a small surplus. In 1947 by far the gravest problem was therefore the dollar problem.

12. In 1947 the gold and dollar reserves of the sterling area (including the expenditure of loan resources) were subject to a net drain of \$4,100 million, of which over \$800 million was on account of the rest of the sterling area. These reserves are, of course, the reserves of the sterling area as a whole. Very large reductions have already been made

in this outflow during 1948; in the first half of the year the net outflow was at an annual rate of little over \$2,000 million, half that of 1947.

(3) Nature of the Solution Proposed

13. The task before the United Kingdom of the next four years, as for the other participating countries, is to close the gap in the balance of payments and to overcome the shortages of essential commodities which were experienced even when expenditure on imports exceeded overseas income by so large a margin. A wide variety of policies must work together to this end.

14. Total home production must be increased. This requires steady increases in productivity and the maintenance of stable financial conditions. Exports must be expanded, and the proportion of imports coming from non-dollar sources must be increased. The general policies which it is intended to follow on these matters are set out in Chapter II.

15. A number of particular industries have especially important parts to play. These are described in Chapter III.

16. A large home investment programme and a careful control of its composition are clearly of great importance. This is discussed in Chapter IV, while Chapter V deals with investment in overseas territories.

17. If these policies are carried through successfully and are accompanied by the development of international collaboration on the one hand and on the other by the continuance of external aid on an adequate scale, it is believed that the objective of stable and satisfactory economic conditions independent of outside aid can be achieved in the United Kingdom in 1952-53. Chapter VI sets out estimates of the balance of payments that might be reached and indicates some of the problems associated with it.

18. In Chapter VII the consequences of the policies and programmes set out in Chapters II-VI on the levels of activity and consumption in 1952-53 are briefly described. Finally, this Chapter emphasises the vital parts which external assistance and international collaboration must play in the development and execution of this programme.

19. Before commencing the full exposition it may be convenient to summarise at the outset certain essential features of these policies.

20. This Programme pays full regard to the obligations entered into under the Convention for European Economic Co-operation signed in Paris on 16th April, 1948, and the Economic Co-operation Agreement with the United States Government signed in London on 6th July, 1948. It is submitted to the Organisation for European Economic Co-operation as a contribution towards the preparation of a joint recovery programme.

21. It has been prepared on the assumption that the obligations of

the European Convention will be continuously and progressively implemented during the period to 1952, and that the co-operation thus achieved will continue to bear fruit in later years. The results it is hoped to achieve would be impossible without the continuance of external assistance during the period of recovery and without the closest co-operation with the participating countries, and with other countries of the British Commonwealth.

22. A major objective of the United Kingdom's programme is the maintenance of sterling as an international currency; this in itself is a positive contribution to international economic stability. In order to secure this objective the maintenance of the sterling area gold and dollar reserves is essential.

23. The policies and programmes described are designed to solve both the general balance of payments problem and within this the particular problem of the balance with the Western Hemisphere. The solution of the former is seen to lie much more in the continued increase of overseas earnings than in a reduction of overseas payments. Thus exports in 1952-53 are estimated at 150 per cent. of the volume of 1938, and 38 per cent. above the level achieved in 1947. A very great improvement is also sought in the balance of invisible payments, including under this term earnings from oil. Net invisible earnings are estimated to yield in 1952-53 over \$1,000 million against some \$950 million, at the present exchange rate, in 1938, and a deficit in 1947 of nearly \$800 million. Aggregate imports, after allowing for a measure of overseas investment, are expected to remain at around the level now programmed for 1948-49, somewhat above the 1947 level, but still significantly less than pre-war.

24. The programme shows a potential solution of the Western Hemisphere payments problem along the following lines. Starting from the huge deficit of \$2,700 million in 1947, it shows a gain in net invisibles of some \$600 million, largely due to shipping, oil and tourism. It allows for an expansion of export earnings of \$800 million, an increase of some 120 per cent. above the 1947 level, and a reduction of imports of \$1,000 million. Even these large changes will still leave some \$300 million to be covered by gold or dollar earnings from the rest of the sterling area. These increases in exports and invisibles presuppose an immense effort, and it should be made quite clear that the reduction in imports from the 1947 level is in no way conceived as desirable in itself. This reduction, much of which has already taken place, is in the main a return towards the traditional distribution of imports from the distorted pattern of 1947 when the United Kingdom, in common with other European countries, was abnormally dependent on supplies from the Western Hemisphere. On present evidence it is not now thought realistic to estimate direct earnings of Western Hemisphere currencies at a higher figure than here shown, or to rely upon earning more gold and dollars by trade

with the rest of the world. If in the event it proves possible to increase these earnings further, the Western Hemisphere import programme can be readily increased to the advantage of the United Kingdom economy and without modification to other plans.

25. The eventual balance of payments shown is consistent with levels of production and consumption substantially higher than the present. This is due not so much to the increase in imports over 1947, as to the fact that home production is planned to increase by more than is needed to provide the additional exports. The expansion of home agriculture will enable the level of food consumption to rise considerably above that of 1948-49. Manufacturing output, supported by the increased output of steel and by provision in the import programme of a higher scale of raw material supplies, can be about 25 per cent. above 1947, and the supply of capital equipment to industry about 15 per cent. above.

(4) *Progress Since 1947*

26. The attainment of such levels clearly calls for a sustained effort from the British people. But the substantial progress achieved during the first half of 1948 is solid evidence that it will be forthcoming.

27. The improvement in the balance of payments has been striking. The following table compares the provisional estimate of the balance in the first half of 1948 (expressed as an annual rate) with the figures for 1947 and the estimates for 1952-53 given in Chapter VI:—

UNITED KINGDOM BALANCE OF PAYMENTS ON CURRENT ACCOUNT

(A) *With All Areas*

	1947 (Current Prices)	1948 (Annual rate) January-June (Current Prices)	\$ million 1952-53 (Programme Prices)
Total payments for Imports	6,206	7,150	8,030
Receipts from Exports and Re-exports	4,441	5,892	7,377
Deficit on Visible Trade	—1,765	—1,258	—653
Invisibles (Net)	—774	+130	+1,053
Balance on Current Account	—2,539	—1,128	+400

(B) *With Western Hemisphere*

Total Payments for Imports	2,885	2,370	1,888
Receipts from Exports and Re-exports	661	944	1,455
Deficit on Visible Trade	—2,224	—1,426	—433
Invisibles (Net)	—476	—146	+142
Balance on Current Account	—2,700	—1,572	—291

Moreover, as already stated, the net drain on gold and dollar resources in the first half of 1948 was at a rate only half of that ruling in 1947.

28. Similar progress has been made with home production. The index of industrial production for the second quarter of 1948 stood at 13 per cent. above the average of 1947. During the same three months, coal production averaged 9 per cent. above the same quarter last year. In the first six months of 1948 steel production was at the annual rate of $15\frac{1}{4}$ million long tons compared with a total output of $12\frac{3}{4}$ million tons in 1947. During the second quarter of 1948 cotton yarn output was nearly 20 per cent. above the average for 1947 and rayon yarn about 20 per cent. above. The total value of production of agricultural machinery in the second quarter of 1948 was \$67 millions compared with a quarterly average in 1947 of \$44 millions. There has been a marked expansion over last year in livestock numbers and in the amount of land under cultivation. Poultry flocks have increased by a fifth and the number of pigs by a third. The rate of exports in the second quarter of 1948 was already more than half-way between that of 1947 and the rate now expected to be maintained in 1952-53 and later years. The increases in the exports of engineering products and textiles are especially notable. Many other examples of steady progress could be given to illustrate the distance the United Kingdom has already gone along the road to recovery.

CHAPTER II.—GENERAL POLICIES

29. In this chapter are described the policies of a general nature that the United Kingdom intends to adopt in order to guide the nation's effort in the economic field during the next four years. These general policies are fundamental to the success of the more detailed plans and programmes described in subsequent chapters.

(1) The Promotion of Understanding and Common Effort

30. The difficulties of the present economic position do not present themselves in an obvious form to the British public. Unemployment is barely noticeable; jobs are apparently secure; industry is finding it easy to earn profits; wages are relatively high; the necessities of life are more fairly distributed than ever before; and because they cannot buy many necessities, many people have money which they can spend on things which they would otherwise regard almost as luxuries. A real and grave crisis in economic affairs seems remote and unreal. At the same time many workers have in the background of their minds the unemployment between the wars. This comes to the surface when the practical problems of changes in the structure of industry involve changes of employment, and, perhaps, the risk of unemployment in the transition.

31. For this reason it has been, ever since the end of the war, the policy of the United Kingdom Government to give the people at all times

the fullest information about the realities of the economic situation, and to impress upon them the need for a high level of production. A large volume of statistics of current economic affairs is published monthly; and every year there is issued an Economic Survey in which immediate needs, prospects and policies are explained as fully and forcibly as possible. Modern techniques of publicity are used to explain and bring home the contents of these surveys, and generally to make known to the nation its fundamental economic problems and the policies necessary for their solution.

32. Techniques of joint consultation between Government, management and labour in the preparation and execution of plans have been widely developed. These are essential to the efficiency of democratic planning and to the promotion of a proper understanding of national problems. At the highest national level the Economic Planning Board, the National Joint Advisory Council and the National Production Advisory Council for Industry are particularly concerned with general policies. For particular industries the Departments concerned have their own machinery for consulting the management and trade union side of such industries at the national level. At the regional level the Regional Boards for Industry (represented by their chairmen on the National Production Advisory Council for Industry) bring together the regional officers of Government Departments and the two sides of industry. The general purpose of all these consultative bodies is similar; they provide a regular means of consultation between Government, management and labour.

(2) *Fiscal Policy*

33. The central principle which guides the financial policy of the United Kingdom was stated by the Chancellor of the Exchequer in opening his budget on 6th April, 1948, "Government expenditure and revenue ought not to be considered in isolation from their effects upon the general economic prospects of the country. . . . The new task of the Chancellor of the Exchequer is not merely to balance the budget; it is a much wider one—to match our resources against our needs so that the main features of our economy may be worked out for the benefit of the community as a whole."

34. In order to make the fullest use of the available resources, the fiscal policy of the Government must be directed to the maintenance of a high level of employment. It became evident in the course of the year 1947 that a persisting inflationary pressure, originating in the necessities of financing a total war, was liable to impede the course of recovery. The pressure of home demand was competing with the needs of the export drive, both directly and through its tendency to drive up costs and prices. At the same time, an abnormal prosperity was being experienced

by all industries, which hindered the best use of resources because of its effect upon the expansion of those industries whose products were most urgently needed from the national point of view. Both the supplementary budget of November, 1947, and the budget for the fiscal year 1948-49 were designed to correct this situation. In opening the 1948 budget, the Chancellor stated one of its principal objectives in the following words: "Sufficient purchasing power must be withheld by taxation and by voluntary saving to offset the purchasing power created by public expenditure and capital investment." Since the current level of voluntary savings was inadequate to finance the investment programme, the 1948 budget was designed to produce a surplus of revenue over current expenditure of £780 million (over 3 billion dollars), which was expected not only to meet the capital expenditure of the Government but to provide a further sum estimated at about £321 million (over 1¼ billion dollars) towards the total saving needed to offset private investment.

35. Thus the policy of public finance is to maintain full employment but to counter any inflationary pressure arising from a deficiency of voluntary saving in relation to the projected level of investment. The application of this policy is a matter of considerable delicacy and it is clearly impossible to forecast the particular form which will be taken by subsequent budgets. The investment policy described elsewhere in this programme, which plays a large part in the plans for recovery, is placing, and will place, a heavy strain on British resources, particularly in view of the objective to eliminate the present overseas deficit within the period of four years.

36. If a deficiency in demand became apparent, the policy of full employment would require an appropriate change in fiscal policy. To quote again from the 1948 budget speech: "We must watch the situation carefully and be ready to detect the moment when the inflationary pressure vanishes and gives place to deflationary tendencies; if such a thing should happen, we must then make a rapid readjustment of our economic and financial policies."

37. Within this general framework the fiscal provisions should encourage the general increase in productivity which is looked for during the recovery period; while the system of indirect taxation and of subsidies contributes towards a general policy of price and wage stabilisation. To encourage productive effort the 1948 budget made considerable reductions in the burden of direct taxation on earned incomes and the rates paid on the lower ranges of income were reduced. The policy of food subsidies, which was designed to keep down the costs of essential foodstuffs and thus to support the general objective of costs stabilisation referred to in the following section, was continued. One of the problems of an inflationary situation is the difficulty of securing the redeployment of labour into the more essential but not

always the more attractive industries, and the present fiscal policy, accompanied by the measures described below, is designed to assist this movement.⁴⁰

*Conclusions*⁴¹

219. Broadly speaking this Programme provides for an expansion of output in manufacturing, mining, agriculture, building and public utilities taken as a whole to a level about one-third above pre-war and, despite a constant or slightly declining labour force, to increase manufacturing output by a quarter in the five years from 1947 to a level about 40 per cent. above 1938. This expanding output will make possible an estimated expansion of exports by nearly two-fifths above the level achieved, after two years' intensive effort, in 1947, and this in turn will support a considerable increase in raw material imports. At the same time the supply of capital equipment to home industry should increase to a level about 15 per cent. above 1947. As has been shown in paragraphs 26-28 the United Kingdom has already made substantial progress towards these objectives.

220. A growth of output and trade of this magnitude will, besides reducing the balance of payments problem to manageable dimensions, permit a distinct increase in home consumption per head not only beyond the somewhat meagre standards of 1947 but, in many respects, beyond pre-war levels. The supply of manufactured goods for the consumer should rise 15-20 per cent. above the 1947 level, with clothing and household goods somewhat above the pre-war level. There should be sufficient supplies of the chief energy-producing foods and notable increases in the 1947 levels of consumption per head of meat, eggs, oils and fats. The consumption of food as a whole would approach the pre-war volume and the more equal distribution of the national income which has been secured in recent years would imply that the standard of food consumption of a large part of the population should be markedly better than before the war.

The Rôle of External Assistance

222. The absence or the inadequacy of aid would, in the first instance, show itself in a reduction in the years before 1952 in the supplies of food, raw materials, machinery or oil presupposed in the programme set out in the preceding chapters. The implications of such a deficiency

⁴⁰ The remainder of this chapter discusses the manner of restraining rises of income; specific measures taken to secure the redeployment of human resources, and to increase productivity; control of production and consumption; and the broad lines of international policy.

⁴¹ We omit Chapters III (Major Industrial Plans), IV (Investment in the United Kingdom), V (Development of Overseas Territories), and VI (Estimate of the Balance of Payments in 1952-53).

are clear. A reduction in the supplies of food would endanger first the nutrition of the British people and thus in time undermine the drive for increased productivity on which so much of the United Kingdom's hopes for the future depend. Without this assistance it would be necessary for the United Kingdom to devote more of its resources to meeting its essential food needs, so reducing correspondingly the home investment programme and the exports of capital goods required for the development of the participating countries and the associated overseas territories. More directly, any substantial cut in raw material supplies would inevitably imply a corresponding cut in home investment and in exports of capital goods—in the rate of industrial re-equipment at home and in the contribution which the United Kingdom can make to development overseas. Hope would have to be abandoned of carrying through the great developments in the United Kingdom economy which are the basis of this programme.

223. It is thus seen that the assistance of the United States plays a vital part in the United Kingdom's recovery plans. But it also strengthens the United Kingdom's capacity to co-operate with the other countries of O.E.E.C. in the pursuit of joint recovery plans. It contributes to the stability of their currencies thus enabling the gradual strengthening of multilateral trade. The position of the United Kingdom as the center of a large group of nations trading in sterling is such that any setback in its recovery would have widespread repercussions throughout the economic systems of the world. The immediate measures of self-protection enforced by such a setback might start a downward spiral that could not easily be halted.

Full Employment in Australia, May 1945⁴²

Private and Public Investments

A tendency of spending to decline, thus causing unemployment, can be offset by a relatively small increase in public expenditure and by banking policy and other measures to encourage private spending. Just as unemployment breeds more unemployment because unemployed workers and depressed businesses are bad customers for other industries, so employment breeds more employment because extra demand for some goods enables the producers of those goods to increase their purchases and so on. If government maintain a continual close review of current

⁴² The Parliament of the Commonwealth of Australia: *Full Employment in Australia* (May 30, 1945). Reprinted in *Hearings before Subcommittee on Banking and Currency U.S. Senate on Full Employment Act of 1945* (revised), pp. 86-104. Only a few excerpts are given here; page numbers refer to the U.S. Senate reprint.

and prospective trends in spending and the level of activity in the economy, they will be ready to act as soon as a decline threatens. The earlier they do so, the smaller will be the increase of public and private expenditure required. When expenditure is increased it will give additional employment and incomes to some producers; their extra spending will still further increase employment and incomes, and this process will go on for some time multiplying on itself. (p. 89)

The commonwealth government believes that the greatest single contribution to the stability of private capital expenditure will be the assurance that total spending will be maintained at high and stable levels. Furthermore, special plans will create new opportunities for private capital expenditure. For example, the commonwealth and state governments are agreed on plans for a substantial expansion of house building activity as soon as the war permits. Building is an important element of private capital expenditure, and industries associated with it should be on a firm basis for expansion for many years to come. (p. 91)

The essence of the employment policy outlined in this paper is the willingness and ability of governments and governmental authorities to undertake sufficient capital expenditure of the right kind at the right time and in the right places. Accordingly, it will be necessary at regular and frequent intervals to consider the amount and composition of public capital expenditure in relation to the total programme necessary to maintain full employment. Under peace-time conditions, by far the larger proportion of public capital expenditure will be the immediate responsibility of governmental and semi-governmental agencies other than the commonwealth. For this reason, the existing machinery for conclusion between the commonwealth and state governments must be used and develop for reviewing and co-ordinating public capital expenditure as a major instrument of full employment policy. (pp. 103-4)

Balance of Payments and Correctives

A policy of full employment, brought about through the maintenance of high levels of expenditure, will necessarily involve an increased demand for imports. Australia has always been a heavy importer of materials and, with an expanding national income, will continue to be so in the future. But the amount we can spend on imports is limited by the amount of export proceeds, together with reserves of overseas funds, which are available for this purpose.

The government is taking measures designed to expand and stabilize post-war markets for Australia's exportable products, which will help to achieve greater stability in our export incomes. (p. 97)

The full success of these measures, however, depends upon the general state of employment and economic activity throughout the world,

which largely determines the demand for internationally traded goods. The government is therefore seeking an international agreement among important trading countries to maintain high levels of employment within their own territories.

Australia must be prepared for some fluctuations in the balance of payments. Difficulties may arise from a decline in the world demand for Australian exports, either because of a failure on the part of important trading countries to maintain employment and spending, or because of a shift in world demand to products different from the ones we have been exporting. There are also climatic and other temporary factors which will continue to have an important effect on exports.

Minor fluctuations in export income will, as in the past, be met by running down overseas reserves in poor export years, and building them up in good years. The government's banking legislation provides the Commonwealth Bank with adequate powers to mobilize our foreign exchange reserves and will ensure that the best use is made of them.

If there is a prolonged and severe fall in export incomes, it will not be possible to meet the deficit in the balance of payments merely by drawing from overseas reserves, and we shall then have to reduce expenditure on imports. In the past, necessary reductions in imports have usually been allowed to come about by permitting a fall in export incomes to result in reduced spending by export producers, thus bringing about unemployment and a general fall in incomes to the extent necessary to reduce imports to the level at which they could be paid for from export income. This deflationary method is inconsistent with a full employment policy, and serves the interests neither of the people of Australia nor of the people of the countries with which Australia trades. The government will not countenance this method in future.

Other means of reducing imports will thus be required. If the deficit in the balance of payments is primarily due to a permanent decline in overseas demand for Australian products, and if it is not possible to restore export income by shifts of productive resources to meet changes in world demands, an alteration in the exchange rate may be the appropriate method of correction. If, however, the fall in export income is one which, although prolonged and severe, is not permanent, the more appropriate method may be quantitative restriction of imports.

The kind of action taken to control imports would depend on the government's assessment at the time of the causes and probable duration of the deficit in the balance of payments. The government considers there are good grounds for expecting a reasonably steady expansion of export income in the future. If, however, there should be a serious deficit in the balance of payments, import spending will inevitably have to be reduced. It would be in the interests neither of the world nor of ourselves

to make the reduction by means of employment in Australia. Australia will make its maximum contribution to the flow of world trade by maintaining full employment at home, and by allowing the consequent high level of expenditure to become effective in demand for imports up to the limit of our available oversea funds. (p. 98)

Inflation and Wages

This policy will need careful administration. Not only will it be necessary to offset a tendency for spending to decline, but governments must also ensure that total expenditure is not too high. As long as there are unemployed resources to be drawn into production, increased expenditure will produce a higher level of employment, but once full employment has been reached, production is at its maximum. A higher level of expenditure would then cause prices to rise, with adverse effects on the stability of the economy and on the welfare of large sections of the community. (p.90)

A sense of the responsibility of the trade union movement to the community is more likely to be fully developed if unions generally are satisfied that the system of wage fixation is such as to pass to workers a fair share of increased output flowing from the growing productivity of labour as technical processes improve, and our resources are further developed. It should be possible to have a periodical review of the standard of consumption which the basic wage is to represent—a review designed expressly to ensure that the normal upward trend of real output available per head is duly reflected in the level of real wages. The main factor affecting this trend will be progressive technical improvements increasing the productivity of labour. (pp.96-7)

Mobility

It is essential that a full employment economy should not run along in a groove, unresponsive to the changing wants of the people and to technical progress. Unless the economic system is flexible and responds effectively to changing circumstances, full employment can be achieved only at the cost of using resources in relatively unproductive and wasteful employment. To an important extent, this problem can be solved if a spirit of enterprise is alive amongst all concerned with productive effort, whether businessmen, primary producers or workers. But in order that such a spirit may have full scope, workers wishing to change their employment must have a ready means of discovering favorable opportunities; equally, employers need a ready means of getting in touch with additional workers with suitable abilities when they wish to expand their activities. (p. 94)

Canadian White Paper on Employment and Income ⁴³

Objectives

In setting as its aim a high and stable level of employment and income, the government is not selecting a lower target than "full employment." Rather, the government is mindful that employment and incomes will be subject to fluctuations in the sphere of international trade, which can not be wholly and instantaneously offset, and that seasonal fluctuations, resulting from climate and buying habits, are not to be overcome without much patient and resourceful work. (p. 105)

Public Investment Policy

After the War: The deliberate use of public investment expenditures as a permanent instrument in employment policy has to be undertaken experimentally. There is, as yet, no working model even in other countries. It will be necessary to frame policy to fit the facts of the Canadian economy and administer it in accordance with our federal constitution. The government believes, however, that there will be wide agreement in making a substantial beginning along two lines:

(a) the undertaking of advance planning of all necessary and desirable Dominion projects so that there may be available a "shelf" of soundly planned projects, ready for execution when prospective employment conditions make it desirable to increase public investment expenditures. Since in the inter-war years the public investment expenditures of provincial and municipal governments have been much greater than those of the Dominion Government, it will be an essential part of such a policy that advance planning on the part of these governments should be encouraged, and, without interfering with provincial or municipal decisions in respect of the direction of their own expenditures, co-operation should be sought on the timing of such expenditures.

(b) the implementation, in co-operation with the Provinces, of a new Dominion policy, of expenditures on the development and conservation of natural resources. In view of the rapid wartime depletion of natural resources, provision for such expenditures is urgent. While some of these expenditures must be continuous, a substantial portion of them may be varied according to employment and income levels. The resources of the farm, forest, mines, fisheries and rivers are basic to Canadian development and prudent expenditure on their conservation and development will be true investment expenditure yielding valuable returns. The returns will be greatly enhanced, if the development and conservation of the resources of particular areas can be co-ordinated.

⁴³ *Hearing before Subcommittee on Banking and Currency U.S. Senate on Full Employment Act of 1945 (revised), pp. 104-18.*

Such expenditures would provide some measure of alternative income in the areas affected by declines in export markets, and thus would fight most of our depressions at the point of first contact rather than after they have spread through the economy. There is in the field of development and conservation the opportunity at appropriate times for genuine public investment which would induce more private investment and not supplant it.

Beginning on these two lines, the Dominion government would seek to enlarge the scope of its public investment program as rapidly as experience could be acquired in its management and sound plans laid for the future. In undertaking the policy, the Dominion would not seek in any particular to limit the control of provinces over their own resources nor to divert any of the revenues to be derived from them. (p. 113)

Mobility

A high overall demand for labour will not of itself assure jobs for all. The kinds of work offering and the places where unfilled jobs exist will change with the seasons of the year and with the development of new consumer demands, new industries, new processes, and new materials. There must, therefore, be a high degree of mobility of labour as between occupations, and between jobs and places. This is particularly true of such a country as Canada at its stage of development and with its climatic conditions. The attainment of the required mobility and adaptability will depend in large degree on the initiative and resourcefulness of the workers themselves. (pp. 114-15)

Fiscal Policy

In these circumstances, the government considers the post-war debt problem to be quite manageable. The government will be prepared, in periods when unemployment threatens, to incur the deficits and increases in the national debt resulting from its employment and income policy, whether that policy in the circumstances is best applied through increased expenditures or reduced taxation. In periods of buoyant employment and income, budget plans will call for surpluses. The government's policy will be to keep the national debt within manageable proportions, and maintain a proper balance in its budget over a period longer than a single year. (p. 116)

India: An Exercise in Economic Arithmetic

Introduction to the Bombay Plan

IN 1944, eight leading businessmen in India wrote *A Plan of Economic Development for India*, now known as the Bombay Plan. This plan is little more than a statement of objectives. In the present chapter, we reproduce the major part of this plan, omitting paragraphs 19-39, 57-9, 67 (part), 68-75, which give details of the minimum standards of living to be achieved, a discussion of some aspects of agricultural improvement, and of the educational and housing program.

Details of planning; the administrative problems involved; the manner of re-allocating economic resources and of raising productivity—these and many other aspects of the problem do not greatly concern the Bombay planners. Theirs is the task of setting up goals to achieve.

They note the minimum standard of living to be set in terms of diet, clothing, housing, health, and education, and estimate what the costs would be. In 1929, consumption of cotton piece goods was but 16 yards per capita in India, as compared with 64 yards in the United States. In Bombay, the average floor space per person was 27.58 square feet, the goal, 100 square feet. Large advances are required in health standards: expectation of life for males was 60.6 years in the United States, and but 26.9 years in India. In respect to water supply, it is known that out of the 1,471 towns in British India in 1939, only 253 towns with a population of 13 millions had protected water supplies, and sanitation

standards generally were no better. Literacy in India for a given age group was but 14.6 per cent as compared with 80 per cent in advanced countries. In short, there was much room for improvement.

In 1939, per capita income in British India was but 4.5 per cent of that in the United States, 7 per cent of that in the United Kingdom, and about 30 per cent of that in Japan. The Bombay Plan proposed to raise India's income within fifteen years by 300 per cent, and its per capita income by 200 per cent, a goal to be achieved in part by a rapid industrialization. The rise of income in industry was to be 500 per cent, in agriculture 130 per cent, and in services 200 per cent. It was deemed necessary to encourage basic industries—e.g., power, engineering, and transport; to import large amounts of capital from abroad, in large instalments in the early years and smaller ones later, as the amount of domestic capital available would rise. Among the features of the plan were special attention to power development, free scope given to consumers' choice, the encouragement of small industries, which are economical of capital and which also are sources of employment, a low ratio of capital to labor in accordance with the greater availability of labor relative to capital, and agricultural reform. The Bombay group also emphasized the need of more roads, railroads and shipping, and the improvement of education as prerequisites of large industrial advances.

Finance, in the views of the Bombay group, was a "camp follower." They would not write down their plans for fear of not obtaining adequate money. They anticipated that close to £2,000 billion required for external use would be had from the following sources:

Hoarded wealth—£225 million
£ Sterling securities—£750 million
Balance of trade—£450 million
Foreign borrowing—£525 million

In addition, they would obtain £5,550 million for internal use: £3,000 million out of savings and £2,550 million out of "created" money. The manufacture of money to create wealth was held to be justifiable by the Bombay group, since the corresponding loans would be self-liquidating. Temporarily, however, there would be pressure on prices. "During this period, in order to prevent the inequitable distribution of the burden between different classes which this method of financing will involve, practically every aspect of economic life will have to be so rigorously controlled by government that individual liberty and freedom of enterprise will suffer a temporary eclipse."¹

Many did not receive the Bombay Plan kindly. The London *Economist*, for example, criticized it for its grandiose pattern, for its failure to

¹ *A Plan of Economic Development for India* (1944), p. 55.

support agriculture, for its inflationary implications, for its authoritarian nature, and for its protectionist tendencies.²

An official report published after the first part of the Bombay Plan had been issued was much less ambitious. The government was interested in raising standards of living and providing full employment, and would make some use of controls developed in wartime. They would rely on programs of public investment and social welfare and investigate the industrial possibilities prior to definite recommendations, being prepared to have recourse to protectionist measures to support industry.³

BOMBAY PLAN

Memorandum: Introduction ⁴

(1) *Aim of Memorandum*

This memorandum presents in brief outline a plan of economic development for India. The plan set out in it is not in any sense a complete scheme nor is its scope so comprehensive as that of the National Planning Committee to whose labours the conception of a planned economy for India is very largely due. Our object is merely to put forward, as a basis of discussion, a statement, in as concrete a form as possible, of the objectives to be kept in mind in economic planning in India, the general lines on which development should proceed and the demands which planning is likely to make on the country's resources. It contains no reference to such essential matters as the organization, methods, and technique required for carrying out a plan. For instance, neither the problem of distribution, which is vital to any scheme for raising the standard of living, nor the allied question of the control to be exercised by the state over economic activities are discussed in it. . . .

(2) *Political Assumptions*

Underlying our whole scheme is the assumption that on the termination of the war or shortly thereafter, a national government will come into existence at the centre which will be vested with full freedom in

² *The Economic* (London), March 1, 1944, pp. 334-5, and May 13, 1944, pp. 636-8.

³ Government of India: *First Report on the Progress of Reconstruction Planning*, March 1, 1944.

⁴ The rupee figures quoted in the text have been converted into their sterling equivalents (shown in brackets) at the rate of 1s. 6d. per rupee.

economic matters. The maintenance of the economic unity of India being, in our view, an essential condition of any effective planning, we have assumed for the purpose of our plan that the future government of India will be constituted on a federal basis and that the jurisdiction of the central government in economic matters will extend over the whole of India. We should, however, explain that this does not preclude the possibility of a regional grouping of provinces and states as an intermediate link in a federal organization. Such regional groupings will not disturb the economic unity of India, provided that, in important matters affecting economic development, the authority of the central government is not impaired. We draw attention to this aspect of the problem because we think that no development of the kind we have proposed will be feasible except on the basis of a central directing authority which enjoys sufficient popular support and possesses the requisite powers and jurisdiction.

(3) *Planning Organization*

We contemplate that under the central government there will be a national planning committee in which the various interests concerned will be represented and to which the responsibility for drawing up plans will be delegated. The actual execution of the plans will be the function of a supreme economic council working alongside the national planning committee under the authority of the central government. The co-ordination of the duties assigned to these two committees and their relation to the various provincial and regional governments will be among the most important problems that will arise in connection with the constitutional aspect of our proposals.

(4) *Objective of Plan*

The principal objective of our plan is to bring about a doubling of the present *per capita* income within a period of fifteen years from the time that the plan comes into operation. Allowing for an increase in population of 5 million per annum, which is the rate disclosed by the last decennial census, we estimate that a doubling of the *per capita* income within a period of fifteen years will necessitate a trebling of the present aggregate national income. To achieve this increase, we propose that the plan should be so organized as to raise the net output of agriculture to a little over twice the present figure, and that of industry, including both large and small industries, to approximately five times the present output. This would still leave our economy mainly agricultural in the sense that the greater part of the population would continue to be engaged in agriculture and allied occupations although the present preponderance of agriculture would be considerably reduced.

(5) *Industrial Development*

It is an important part of our proposals regarding industrial development that in the initial stages attention should be directed primarily to the creation of industries for the production of power and capital goods. Nothing has more seriously hindered the development of India's industrial resources during the war than the absence of these basic industries, and we consider it essential that this lack should be remedied in as short a time as possible. Apart from its importance as a means of quickening the pace of industrial development in India, it will have the effect of ultimately reducing our dependence on foreign countries for the plant and machinery required by us and, consequently, of reducing our requirements of external finance. The proposal, however, is subject to this important qualification that provision should be made at the same time for the manufacture within the country of the most essential classes of consumption goods, as otherwise a great deal of unnecessary hardship may be caused during the planning period. We suggest that, in the production of these essential consumption goods, the fullest possible use should be made of small-scale and cottage industries. This will, besides providing employment, reduce the need for purchasing expensive plant and machinery.

(6) *Difficulties Anticipated*

We are well aware of the difficulties which may stand in the way of our objective being attained within so short a period. The execution of the plan will run counter to many deep-seated prejudices and traditions. In the initial stages it will call for a very large measure of personal discomfort and sacrifice. Political differences may make it difficult to set up the necessary constitutional machinery. The international situation after the war may be such as not to permit of the orderly continuance of constructive activities on this scale. If difficulties of this character supervene, the progress of the plan will be materially hampered. Nevertheless, we think that it is worth while placing before the country a plan which, given favourable conditions, can be realised. The difficulties we have indicated may delay the scheme but will not necessarily make it impossible of achievement. We have some hope that if the programme we have put forward makes an appeal to the country, that by itself will help in some measure towards securing the conditions necessary for its fulfillment. It may be pointed out that the fifteen-year period we have suggested is intended to cover only the execution of the plan and does not include the time required for the necessary preparatory work, which may take about three to five years. Once the machinery required for executing the plan is properly organized, and given sufficient courage and energy in those responsible for carrying it out, we do not think

that the attainment of our objective within the period indicated is an extravagant hope.

(7) *Problem of Finance*

The estimates of capital expenditure contained in the memorandum are of such colossal dimensions that the whole scheme may appear impracticable to people whose minds are still dominated by orthodox financial concepts. In matters of this kind, the war has been a great educator. Lord Wavell, in a recent speech in London, remarked: "It has always seemed to me a curious fact that money is forthcoming in any quantity for a war, but that no nation has ever yet produced the money on the same scale to fight the evils of peace—poverty, lack of education, unemployment, ill-health." The answer to this question, which has puzzled many an inquiring mind since the commencement of the war, is that money or finance is not the master of a country's economy, but its servant and instrument. The real capital of a country consists of its resources in materials and manpower, and money is simply a means of mobilizing these resources and canalizing them into specific forms of activity. Looking at the problem from this angle, we are convinced that the capital expenditure proposed under our scheme is well within the limits of our resources and that, from a business point of view, such expenditure will constitute a sound and profitable investment for the country.

(8) *Explanatory Remarks*

With regard to the several estimates of expenditure, production and income contained in the memorandum, it is necessary to explain that, in view of the inadequate data on which many of them are based, they are to be regarded merely as rough approximations and their value as more illustrative than absolute. Further, although most of the estimates are stated in terms of money, it is the quantum of commodities and services they represent that we have primarily in view. Money is used throughout as a measuring rod only; and in order to keep the measure uniform, we have based all money figures on the rupee at approximately the average price level which prevailed during the period 1931-39. . . .⁵

Economic Plan Explained

(35) *Low National Income*

The preceding discussion has shown that our present national income is not sufficient to support even a minimum standard of living. But if

⁵ Chapter 2 on "Requirements of a Minimum Standard" is omitted.

we are going to develop our resources according to a prearranged plan, we should certainly not be satisfied merely by providing for every person the minimum requirements of life. A planned economy must aim at raising the national income to such a level that after meeting the minimum requirements every individual would be left with enough resources for enjoyment of life and for cultural activities. Our present information, inadequate as it is, regarding the potential resources of the country in respect of raw materials, power, and labour leads us to believe that given a systematic plan and adequate organization it is possible to raise our national income within a short time to a level considerably above that required for meeting the minimum needs of life. Comparative figures of *per capita* national income in 1931 for certain countries of the world are given below to indicate the disparity between India and other countries:

ANNUAL PER CAPITA INCOME IN RS.⁶

U.S.A.	1,406 (£105 9s.)	France	621 (£46 11s. 6d.)
Canada	1,038 (£77 17s.)	Germany	603 (£40 4s. 6d.)
U.K.	980 (£73 10s.)	Japan	218 (£16 7s. 0d.)
Australia	792 (£59 8s.)	Br. India	65 (£4 17s. 6d.)

(36) *Aim of Plan*

The objective we propose for a plan of economic development for India may be stated as follows. There should be a threefold increase in the total national dividend within a period of fifteen years from the time the plan is put into execution. The aggregate income of British India as estimated in 1931-32 is Rs. 1,766 crores (£1,324½ millions). This should be raised in fifteen years to about Rs. 5,300 crores (£3,975 millions). Assuming that the figure of *per capita* income calculated for British India is also applicable to the States, the range of increase in the total national dividend would be from Rs. 2,200 crores (£1,650 millions) to Rs. 6,600 crores (£4,950 millions).

(37) *Increase in Per Capita Income*

A threefold increase in the total national dividend will result in an equivalent increase in the *per capita* income only on the assumption that our population over the planning period remains stationary. This assumption is, however, not likely to hold good. In the absence of

⁶ The figures except that for India are from *The Conference Board Economic Record*, August 3, 1939. The original dollar figures are converted at 1 \$ = Rs. 2.289

adequate reliable data regarding fertility, it is extremely difficult to make any forecast about the future growth of our population over a period of years. But after balancing the various factors, we are inclined to believe that the rate of increase recorded during the last decade will generally hold good for the period of our plan. With the progress of the plan, both our birth rate and death rate would decline, but the balance of births over deaths is not likely to show any marked change. At the rate of 5 million per annum the population of India at the end of 1960, assuming the plan to start in 1945, will, therefore, be 489 million and a threefold increase in our total national dividend would in effect mean a *per capita* income of Rs. 135 (£10 2s. 6d.) representing a doubling of the 1931-32 figure.

(38) *A Modest Goal*

This might appear to be too modest a goal for a planned economy to achieve, especially in view of the fact that in the U.S.S.R., within a short period of twelve years since the beginning of the First Five-Year Plan, the national income is reported to have increased from 25 billion roubles to 125 billion roubles, i.e., fivefold. As our national resources are not as extensive and varied as those of the U.S.S.R., and as we are anxious to avoid the heavy cost in terms of human suffering which the U.S.S.R. had to pay to achieve this spectacular result, we must necessarily fix our objective at a lower figure.

(39) *Balanced Economy*

The proposed threefold increase in India's total national dividend will be brought about in such a way that the present overwhelming predominance of agriculture would be reduced and a more balanced economy established. According to the national income figures for 1931-32, the contribution of industry, agriculture, and services to the total national dividend of British India is estimated at 17, 53, and 22 per cent, respectively.⁷ (About 8 per cent of the income has not been classified under any of these categories.) We propose a plan of development under which the respective percentages might be changed roughly to 35, 40, and 20 for the whole of India. On the basis of these percentages, the threefold increase in the national income which is aimed at would involve the following increments in the net income from industry, agriculture and services:

⁷ As agricultural prices in 1931 were very low on account of the general economic depression, these proportions would be different in normal times. The proportion of income from agriculture would be higher and that from industry and services would be lower.

	<i>Net income in 1931-32 (Rs. crores)</i>	<i>Net income expected after 15 years (Rs. crores)</i>	<i>Percentage increase</i>
Industry	374 (£280½ millions)	2,240 (£1,680 millions)	500
Agriculture	1,166 (£874½ millions)	2,670 ^s (£2,002½ millions)	130
Services	484 (£363 millions)	1,450 (£1,087½ millions)	200

(40) *Agricultural Character Unchanged*

At first sight the percentage increase in industrial income which this plan involves might appear to be disproportionately large as compared with the increase in agricultural income. But it has to be borne in mind that our industrial potentialities have to a great extent remained unexploited so far and adequate provision to make up this lag in industrial development would naturally mean a large percentage increase over the present level. On the other hand, as the demand for food crops which form the bulk of our agricultural products is comparatively inelastic, even after taking into account the probable increase in population and the higher level of income which the plan will bring about and the larger demand for industrial raw materials, it is not likely that more than a 130 per cent increase will be absorbed within the country. It is, however, necessary to mention that, although ultimately the contribution of agriculture to our national dividend will be only 40 per cent as compared with 53 per cent in 1931-32, it will not change the essentially agricultural character of our economy. From the point of view of employment, agriculture will continue to employ the greater part of our population. Even the U.S.S.R., in spite of the tremendous development of industries which she has achieved since the inauguration of the First Five-Year Plan in 1928, has not been able to reduce to any marked degree the percentage of population employed in her agriculture.

(41) *Industries Classified*

The industries which an economic plan for India would seek to develop may be classified into two principal categories: (a) basic industries; and (b) consumption goods industries.

(42) *Basic Industries*

Basic industries, which would get priority over the other type of industries in the earlier years, would include among others the following principal groups:

^s It is necessary to point out that this figure is calculated on the basis of Dr. Rao's estimate for 1931-32, which mainly takes into account harvest prices, while the value of minimum food requirements which we have estimated in paragraph 11 is based on retail prices.

Power—electricity

Mining and metallurgy—iron and steel, aluminium, manganese, etc.

Engineering—machinery of all kinds, machine tools, etc.

Chemicals—heavy chemicals, fertilizers, dyes, plastics, pharmaceuticals, etc.

Armaments

Transport—railway engines and wagons, shipbuilding, automobiles, aircraft, etc.

Cement

(43) *Importance of Basic Industries*

These industries are the basis on which the economic superstructure envisaged in the plan will have to be erected. It is obvious that in modern times no industry can be established without power, machinery, chemicals, etc. Similarly, without fertilizers it is difficult to imagine any progress in agriculture. In the absence of adequate shipping and other forms of transport, economic life especially in a country of the dimensions of India will remain stagnant. But for the lack of most of these industries, India would not have been left so far behind other countries of the British Empire such as Canada and Australia in the matter of industrial development in response to war conditions. We consider it essential for the success of our economic plan that the basic industries, on which ultimately the whole economic development of the country depends, should be developed as rapidly as possible.

(44) *Production of Power*

We have deliberately placed the production of power first in the list of basic industries because we believe that the development of our industries, both large- and small-scale, as also of agriculture and transport, will be determined to a large extent by the development of electricity. The rapid economic development of the U.S.S.R. and Japan during the pre-war period and of Canada during the present war can ultimately be traced to the development of electricity in these countries. In fact in the U.S.S.R. a fifteen-year plan for the electrification of the country, the *Goelro*, was drafted as far back as in 1920, and it was only when the success of this plan was established beyond doubt that the ambitious five-year plans were put into execution. The scope for the development of hydro-electric energy in particular is very large in India. Its potential reserves have been estimated at about 27 million kilowatts, out of which only half a million kilowatts have been developed so far.

(45) *Consumption Goods Industries*

Some of the principal consumption goods industries which should be further developed in India are:

Textiles—cotton, silk and wool
Glass industry
Leather goods industry
Paper industry
Tobacco industry
Oil industry, etc

(46) *Consumer's Choice*

The list of consumption goods industries given above is only illustrative. The nature and kind of consumption goods industries to be developed will ultimately be dependent upon the income of the people. As income increases, the percentage of expenditure on different classes of consumption goods will show marked variations. For example, demand for articles of consumption like furniture, books, artware, etc., which will be relatively small at a low income level, will increase as the general level of income rises. What classes of consumption goods industries should be developed will naturally be decided from time to time, as the plan progresses, in the light of variations in the demands of consumers. As far as is consistent with planning, the free choice of consumers in respect of consumption goods should suffer no restriction.

(47) *Scope for Small Industries*

It is an essential part of our plan for the organization of industries that adequate scope should be provided for small-scale and cottage industries along with large-scale industries. This is important not merely as a means of affording employment but also of reducing the need for capital, particularly of external capital, in the early stages of the plan. It is difficult to define the considerations on which the choice between large- and small-scale industries and cottage industries should be determined. The factors involved in the choice are numerous and often conflicting. But generally it may be stated that while in basic industries there is little scope for small industrial units, they have an important and useful place in consumption goods industries where their function is in many cases complementary to that of large units.

(48) *Capital for Industries*

It is extremely difficult to make an estimate of the amount of capital which India would require to carry out the programme of industrial development outlined above. A large number of the industries proposed would be new to the country and the proportion of capital required by each of them to the net product which it is likely to contribute would show marked variations. It may be explained that by the "net product" of an industry in this contest is meant its gross production less the cost of raw materials and power consumed by it. And "capital" includes not

merely paid-up capital but also general reserves and borrowed funds. In the nature of things some industries like the hydro-electric industry are bound to require in proportion to their net product a much higher proportion of capital than, say, textiles. The proportion of capital employed will also vary according to the extent to which capitalistic methods of production are employed and technological advances are made use of.

(49) *Wide Variations in the Ratio*

No figure either of valuation of capital employed in existing industries in the country or of their net product are available. But the ratios of capital employed to net product worked out on the basis of information given in the balance sheets for the Bombay cotton textile industry, the Associated Cement Companies and the Tata Hydro-electric group are as follows:

	<i>Cotton textile</i>	<i>Cement</i>	<i>Hydro- electricity</i>
1937	2.13	3.12	9.19
1938	2.62	2.11	7.80
1939	3.73	2.53	8.23

(50) *A Low Ratio Assumed*

Taking into account the fact that while India has plenty of labour, her capital resources are comparatively small, we think that industries should be organised in such a way that over the whole planning period the ratio of capital including land and buildings to net product would not be too high. Provision for small-scale and cottage industries in the industrial organization of the future has been suggested by us partly with this object in view. Assuming a ratio of 2.4, which as compared with similar ratios in other countries is a low proportion, the total amount of capital required to increase our net industrial output to Rs. 2,240 crores (£1,680 millions) as visualised in the plan would be in the neighbourhood of Rs. 4,470 crores (£3,360 millions). In this connection it may be mentioned that the amount of capital invested in our industries, excluding railways and other forms of transport, in the pre-war period has been estimated at about Rs. 700 crores (£525 millions).

(51) *Agricultural Development*

In the proposed plan we have aimed at increasing our agricultural production by 130 per cent. The target has deliberately been fixed low. Our idea is that in respect of agricultural commodities India should as far as possible aim at feeding her own population adequately and should not aspire in the initial years of planning to export to foreign markets.

Our plan for agricultural development aims not merely at increasing production generally but also at increasing the production of those crops which are necessary for feeding the population. This would necessarily involve a readjustment of the areas under cultivation of different crops. Areas under commercial crops like jute, tea, cotton, oilseeds, etc., the fortunes of which are to a substantial extent dependent on foreign trade and which have introduced a serious element of uncertainty in our economic life, would have to be adjusted to the conditions of international trade that might prevail in the post-war period. The substitution of a large proportion of the existing short staple cotton by long staple crushing industries within the country would, however, reduce the dependence of these crops on foreign markets. In respect of food crops it is not only desirable that their production should be increased but the proportion of areas under cereals, pulses, vegetables, fruit, etc., would have to be fixed in relation to the requirements of a nutritive diet.

(52) Reforms Proposed

Increase in agricultural production, however, presupposes certain fundamental reforms. The most important question to be solved is that of the size of agricultural holdings. The average holding at present is not more than three acres scattered over the village in tiny fragments. Although there may be definite limits to the advantages arising out of consolidation of holdings and increase in their size, it is one of the main reforms which would be necessary for the adoption of intensive farming. To bring it about, co-operative farming appears to present less difficulties than any other method that may be suggested. It increases the size of the holding for purposes of cultivation without depriving the cultivators of their right to the ownership of their existing holdings. In order that co-operative farming should come into vogue as early as possible, some measure of compulsion appears desirable.

(53) Rural Indebtedness

It is also necessary to liquidate the burden of agricultural indebtedness. The debt which was estimated at Rs. 1,200 crores (£900 millions) before the war has since been probably reduced to a considerably smaller figure as a result of the favourable prices realized by agriculturists during the last two years. It is perhaps possible to reduce this further by means of conciliation. The liquidation of debt should be arranged principally through co-operative societies, which would require to be suitably organized for the purpose and provided with sufficient long-term finance. It may be pointed out that the finance required for this is not included in our estimate of capital expenditure since the debt

of the agriculturist represents the savings of another class and these savings would themselves be available directly or indirectly for financing co-operative societies.

(54) *Soil Erosion*

In addition to the size of holdings and rural indebtedness, there is a third problem the seriousness of which has not yet been fully realized but which will need attention if our agriculture is to be improved. This is the problem of soil erosion. Every year large quantities of valuable top soil are washed away by rain never to come back. If this process goes on, millions of acres of land will be permanently lost for cultivation. It is essential to check this evil in time by terracing arable lands, launching schemes of afforestation and adopting other measures suitable to conditions in different tracts. For soil conservation and other permanent improvements to land, a sum of about Rs. 200 crores (£150 millions) should be provided as capital outlay and Rs. 10 crores (£7½ millions) as recurring expenditure.

(55) *Ways of Increasing Output*

When these three fundamental questions, viz., the size of holdings, indebtedness, and soil erosion, have been tackled, agricultural production in India can be increased by (a) extending the area under cultivation or by (b) improving the yield per acre or by (c) a combination of both. Although at present 18 per cent of the area in British India, 94 million acres, is classified as cultivable waste, it is extremely doubtful whether much of it is really cultivable. The question deserves to be thoroughly investigated.

(56) *Yield per Acre*

Improvement in yield, on the other hand, appears to have great possibilities. The following comparative figures are significant:

YIELD PER ACRE IN TONS

(1939-40)

	<i>Rice</i>	<i>Wheat</i>	<i>Sugar cane</i>	<i>Cotton</i>
U.S.A.	1.01	0.37	20.06	0.11
Canada	...	0.52	....	...
Australia	...	0.42	....	...
Japan	1.61	...	....	...
Egypt	...	...	...	0.23
Java	...	...	54.91	...
India	0.35	0.32	12.66	0.04

(60) Capital for Agriculture⁹

The total amount of capital required for increasing agricultural production to the target figure is shown below :

	<i>Non-recurring expenditure (Rs. crores)</i>	<i>Recurring expenditure (Rs. crores)</i>
Soil conservation, etc.	200 (£150 millions)	10 (£7½ millions)
Working capital	...	250 (£187½ millions)
Irrigation		
Canals	400 (£300 millions)	10 (£7½ millions)
Wells	50 (£37½ millions)	...
Model farms	195 (£146¼ millions)	130 (£97½ millions)
	845 (£633¾ millions)	400 (£300 millions)

(61) Transport and Communications

An increase in the volume of industrial and agricultural production as envisaged in the previous paragraphs will result in a large movement of foods and services within the country. The increase in the net income from trade and services which we anticipate is about 200 per cent. Internal trade may well be expected to increase to an extent which would necessitate a large expansion of the means of communication, particularly railways, roads, shipping and civil aviation. In all these spheres India is seriously deficient. India with an area of approximately 1,580,000 square miles has about 41,000 miles of railway, while Europe, excepting the U.S.S.R., with an area of 1,660,000 square miles has 190,000 miles of railway. Similarly, in British India the proportion of road mileage to area works out at 35 miles per 100 square miles. The corresponding figure for the U.S.A. is 100 and for the U.K. 200. Coastal shipping has been even more seriously neglected. Taking into account the fact that railways have received comparatively more attention in India and that in future the necessity of developing communications in rural areas would be more urgent, we should aim at an increase of 21,000 miles in railways and 300,000 miles in roads. This would mean an increase of 50 per cent over the existing railway mileage and an increase of 100 per cent in the mileage of roads in British India alone. For the development of shipping, our aim should be to improve the small natural harbours that are scattered along India's extensive coast-line and to provide them with loading and unloading facilities. As regards civil aviation, since the expenditure likely to be incurred at the present stage will be relatively small, we have included no specific proposals regarding it.

⁹ Several sections dealing with irrigation, model farming and working capital are omitted.

(62) Railways

The total route mileage of railways in India was 41,000 miles in 1938-39 and the total capital at charge was Rs. 848 crores (£636 millions). Assuming that the ratio of capital to route mileage remains the same, the capital cost of adding about 21,000 miles of new railway line in this country would roughly amount to Rs. 434 crores (£325½ millions). Maintenance charges at the rate of about 2 per cent would work out to Rs. 9 crores (£6¾ millions per annum).

(63) Roads

The length of existing roads in British India is in the neighbourhood of 300,000 miles. Of these 74,000 miles are metalled and 226,000 miles are unmetalled. The programme of doubling this mileage in fifteen years is intended to cover mainly village roads and the humbler district roads. Our idea is that all important villages should be connected with the main highways of trade so that "no village with a population of 1,000 and over should be more than, say, a mile or half a mile from a public road."¹⁰ If side by side with this road development the bullock cart, which is bound to remain the principal means of vehicular traffic in rural areas, is also improved, especially by making the use of pneumatic tyres universal, it would go a long way towards reducing the cost of maintenance. As villages are not likely to have heavy traffic, we suggest that the roads connecting them with traffic roads or trunk roads should be ordinary metalled roads. The use of pneumatic tyres for bullock carts should make them quite suitable for such roads. On an average the cost of a metalled road, 18 feet wide, is estimated at Rs. 10,000 (£750) per mile. On this basis the cost of constructing 300,000 miles of additional road mileage in India would amount to Rs. 300 crores (£225 millions). The cost of maintenance would be Rs. 35 crores (£26¼ millions).

(64) Reconstruction of Existing Roads.

If India is to have an adequate road system in the future it is necessary, in addition to constructing this new mileage of roads, to metal the 226,000 miles of ordinary earth roads that are being used for vehicular traffic at present. The cost of reconstructing these roads at the rate of, say, Rs. 5,000 (£375) per mile would amount to Rs. 113 crores (£84¾ millions). If they are reconstructed, the cost of their maintenance will be less than what is incurred at present.

(65) Shipping

For a long time past, very few ports in India except Bombay, Calcutta, Madras, and Karachi have had adequate shipping facilities. In

¹⁰ Presidential address of Sir Kenneth Mitchell to the eighth session of the Indian Roads Congress, 1943.

recent times several smaller ports, principally in Indian States, have been developed, but still the number of ports suitable for shipping is very small. If shipping is to occupy its legitimate place in the transport system of the future, it is necessary to provide more harbours suitable for small ships. A capital expenditure of about Rs. 50 crores (£37½ millions) may be estimated for the purpose. At 10 per cent the maintenance charges would amount to Rs. 5 crores (£3¾ millions) per annum.

(66) Cost of Transport

The total cost of increasing rail and road mileage and improving ports would thus be :

	<i>Non-recurring expenditure (Rs. crores)</i>	<i>Recurring expenditure (Rs. crores)</i>
Railways	434 (£325½ millions)	9 (£6¾ millions)
Roads		
New construction	300 (£225 millions)	35 (£26¼ millions)
Reconstruction	113 (84¾ millions)	
Ports	50 (£37½ millions)	5 (£3¾ millions)
Total	897 (£672¾ millions)	49 (£36¾ millions)

(67) Co-operation of the People

In the execution of a comprehensive plan of economic development, it is essential that we should be able to count on the willing co-operation of the people. This will be possible only if the masses are able to read and write and are in a position to understand for themselves the broad implications of the developments embodied in the plan. The execution of a plan which aims at an all-round development will also require a huge personnel trained for technical posts in agriculture, industry and trade, and for general administration. Provision of primary education, which has been mentioned as one of the essential requirements of a reasonable standard of living, would under Mr. Sargent's scheme require about 1,800,000 teachers in British India alone. Provision of adequate medical help would need a large number of doctors and nurses. As our natural resources such as minerals, hydro-electric power, soil, etc., are not yet properly surveyed, extensive surveys¹¹ will have

¹¹ Sir Cyril Fox states: As a result of 97 years' work carried out by officers of the Geological Survey of India, it has been found that an average of 500 square miles can be accurately surveyed each year, and that the average service in the field is about 10 years per geologist. Roughly, 100 geologists in all have been so employed since 1846, so that theoretically only 500,000 square miles could have been examined in any detail in the time, and there remain over a million square miles still to scrutinize.

to be undertaken to ascertain their quantity, quality, and distribution and a large number of research stations will be required to carry out investigations. . . .

(71) *University and Technical Education* ¹²

For vocational education,¹³ university education and scientific education and research, the data necessary for a detailed calculation are lacking. We propose, therefore, to take roughly $\frac{5}{1000}$ ths of the national income per year as a comprehensive measure of the expenditure which would be required. This would amount roughly to Rs. 10 crores (£7½ millions) in the first year of the plan and to Rs. 30 crores (£22½ millions) in the last year. It may be mentioned that the total expenditure on scientific education and research amounts to $\frac{1}{1000}$ th of the national income in the U.K., $\frac{6}{1000}$ ths of the national income in the U.S.A. and $\frac{10}{1000}$ ths of the national income in the U.S.S.R. All told, the amount of expenditure on education would be:

	<i>Non-recurring expenditure (Rs. crores)</i>	<i>Recurring expenditure (Rs. crores)</i>
Primary education	86 (£64½ millions)	88 (£66 millions)
Adult education	99 (£74¼ millions)	...
Secondary education	82 (£61½ millions)	129 (£96¾ millions)
University education, scientific education and research	... average	20 (£15 millions)
Total	267 (£200¼ millions)	237 (£177¾ millions)

(72) *Public Health*

The expenditure necessary under public health has been indicated in paragraph 28.¹⁴ No further provision is necessary under a 15-year plan.

(76) *Cost Classified* ¹⁵

The total expenditure which the plan is likely to involve is summarized below:

¹² Several paragraphs on education are omitted.

¹³ The average cost per pupil per annum in the technical and industrial schools in the U.P. in 1937 ranged from Rs. 155 (£11 12s. 6d.) to Rs. 869 (£65 3s. 6d.), although there was a good deal of concentration between Rs. 200 (£15) and Rs. 300 (£22 10s.). The Industrial Commission, 1916-18, estimated that the average cost per pupil in industrial schools would be about Rs. 200 (£15) and that they could be established with a capital of Rs. 500 (£37 10s.) per student.

¹⁴ Omitted here.

¹⁵ We omit several paragraphs dealing with population and housing and other capital expenditures.

	<i>Non-recurring expenditure (Rs. crores)</i>	<i>Recurring expenditure (Rs. crores)</i>
Industry	4,480 ¹⁰ ((£3,360 millions)	....
Agriculture	845 ((£633¾ millions)	400 ((£300 millions)
Communications	897 ((£672¾ millions)	49 ((£36¾ millions)
Education	267 ((£200¼ millions)	237 ((£177¾ millions)
Health	281 ((£210¾ millions)	185 ((£138¾ millions)
Housing	2,200 ((£1,650 millions)	318 ((£238½ millions)
Miscellaneous	200 ((£150 millions)	....
Total	9,170 ((£6,877½ millions)	1,189 ((£891¾ millions)

(77) Total Capital Required

Throughout this section we have shown recurring and non-recurring expenditure separately. We have made this distinction with the object of indicating how the capital expenditure is distributed and how it has been arrived at. In view of the fact that income from agriculture and industry and the revenue required for such services as education, health, and communications may not be available in sufficient amount in the initial years, we have thought it desirable to include in our estimate of the total amount of capital which the plan is likely to require, the recurring charges for one year in respect to the completed plan. On this basis the total capital requirements of the plan we have outlined would amount to about Rs. 10,000 crores (£7,500 millions) distributed as follows:

	<i>(Rs. crores)</i>
Industry	4,480 ((£3,360 millions)
Agriculture	1,240 ((£930 millions)
Communications	940 ((£705 millions)
Education	490 ((£367½ millions)
Health	450 ((£337½ millions)
Housing	2,200 ((£1,650 millions)
Miscellaneous	200 ((£150 millions)
Total	10,000 ((£7,500 millions)

Sources of Finance

(78) External and Internal Finance

In examining the sources from which the finance required for the plan may be obtained, it is important to distinguish between external finance and internal finance. External finance is the finance available for payment to foreign countries for goods and services imported from

¹⁰ The ratio of 2.4 which we have assumed for estimating the total amount of capital required for industrial development includes both fixed capital and working capital. The figure of working capital is not therefore separately calculated.

them, while internal finance is that required within the country for the mobilization of our resources. In the initial years of planning, India will be dependent almost entirely on foreign countries for the machinery and technical skill necessary for the establishment of both basic and other industries. As the plan develops, our dependence on foreign countries in this matter should steadily decline. The imports of machinery and technical skill inevitable in the initial years of planning would require a large amount of external finance, the raising of which constitutes an important problem in a plan of economic development. Internal finance on the scale which we consider necessary will also raise serious difficulties, but in a planned economy these would not be insurmountable. The sources of external and internal finance which would be available to us are:

External finance:

The hoarded wealth of the country, mainly gold

Our short-term loans to the U.K.—sterling securities held by the Reserve Bank of India

Our favourable balance of trade

Foreign borrowing.

Internal finance:

Savings of the people

New money created against *ad hoc* securities, i.e., on the inherent credit of the government

(79) Hoarded Wealth

The volume of hoarded wealth in India has been estimated at about Rs. 1,000 crores (£750 millions) after allowing for the recent export of "distress" gold. A part of this should become available for capital investment if, as is assumed at the beginning of this memorandum, a national government comes into power in which people have full faith and if suitable means are adopted for attracting hoards from their place of concealment. The amount available from this source may be estimated at not more than Rs. 300 crores (£225 millions).

(80) Sterling Securities

Our sterling securities in the Banking and Issue Departments of the Reserve Bank of India amount to about Rs. 800 crores (£600 millions) at the moment. If the war continues for a year or two and His Majesty's Government continue to make purchases from India on the same scale as they have been making them hitherto, the amount is likely to increase to Rs. 1,000 crores (£750 millions). This could be utilized for importing the capital goods required at the beginning of the plan.

(81) *Balance of Trade*

As a result of the general policy of directing agricultural production primarily with a view to meeting the internal demand which we advocate in this plan, our export trade is likely to diminish in future. Side by side, the development of consumption goods industries and food crops within the country will bring about a reduction in the volume of imports. Our favourable balance on normal trade account is not, therefore, likely to shrink below Rs. 40 crores (£30 millions) per annum which, because of the repatriation of most of our sterling debt, will be available as external finance. The total amount which might be expected from this source in 15 years will, therefore, be about Rs. 600 crores (£450 millions).

(82) *Foreign Borrowing*

India's credit in foreign capital markets is now very high and she can, therefore, borrow substantial amounts of capital if she so wishes in these markets, especially in America. Such capital, if it is not accompanied by political influence or interference of foreign vested interests, should not be unwelcome. Even if India resorts to "created money" as she is likely to, since this finance is to be employed for promoting an expansionist economy, its effect on her credit in foreign markets would not be so serious as it otherwise would be. By giving priority to basic industries in our programme of development and by using our sterling balances in the initial stages for importing the necessary plant, machinery and technical experts, it is, however, possible to curtail our requirements of external finance. As the plan proceeds, India would be able to satisfy her requirements of heavy machinery and other capital goods from her own industries. We may put the figure of foreign loans at about Rs. 700 crores (£525 millions).

(83) *Savings in Foreign Countries*

An important source of finance which would assume considerable proportions as national income grows, is the volume of savings within the country. The percentage of savings to national income in some foreign countries is given below:¹⁷

	U.K.	U.S.A.	Germany	Japan	Russia
1900-10	12.2	14.3	19.1	..	8.2
1919-24	8.1	12.2	..	21.9	..
1925-30	7.6	10.9	7.7	19.8	7.8
1934-37	7.0	5.0	11.8	21.9	14.2

¹⁷ Colin Clark: *The Conditions of Economic Progress*, p. 406.

(84) Savings in India

In India, taking into account the fact that the present standard of living is extremely low and that no provision has been made for the increased taxation which a planned economy would necessitate, we do not assume that more than 6 per cent of the national income on an average would become available for investment during the period of the plan. On this basis, the total amount which could be obtained over the whole period from the savings of the people would be in the neighbourhood of Rs. 4,000 crores (£3,000 millions).

(85) "Created Money"

We have estimated the savings which would be available for investment at a conservative figure. It is possible that a large percentage of the national income than we have estimated may be forthcoming as savings. If this possibility, however, does not materialize, a large part of the capital required, about Rs. 3,400 crores (£2,550 millions) would have to be created by borrowing against *ad hoc* securities from the Reserve Bank. New money to this extent can be created only if people have full confidence in the resources and *bona fides* of the government that creates it. There is nothing unsound in creating this money, because it is meant to increase the productive capacity of the nation and in the long run is of a self-liquidating character. At the end of the period, the general level of prices would in all probability be lower than at the beginning of the plan. During the greater part of the planning period, however, financing of economic development by means of "created money" on this scale is likely to lead to a gap between the volume of purchasing power in the hands of the people and the volume of goods available. How to bridge this gap and to keep prices within limits will be a constant problem which the planning authority will have to tackle. During this period, in order to prevent the inequitable distribution of the burden between different classes which this method of financing will involve, practically every aspect of economic life will have to be so rigorously controlled by government that individual liberty and freedom of enterprise will suffer a temporary eclipse.

(86) Sources of Finance Summarized

The amount of capital which we expect to get from the various sources mentioned above is summarized below:

External finance:

	(Rs. crores)	
Hoarded wealth	300	(£225 millions)
Sterling securities	1,000	(£750 millions)
Balance of trade	600	(£450 millions)
Foreign borrowing	700	(£525 millions)
	<hr/> 2,600	<hr/> (£1,950 millions) *

Internal finance:				
"Savings"	4,000		(£3,000 millions)	
"Created money"	3,400		(£2,550 millions)	
		7,400		(£5,550 millions)
Total		10,000		(£7,500 millions)

(87) *Method of Raising Finance*

Our object in this section has been to indicate the sources from which the capital expenditure required for the plan may be met. The precise form in which the capital may be raised, whether by the state in the shape of taxation or government borrowings or by private voluntary investment, is a question which can only be considered, when the plan is ready for execution, in the light of conditions then prevailing. It will depend among other things on the role to be assigned to the state in the future economy of the country and also on the position of the money market after the war.

(88) *Finance, Only a Camp Follower*

It is necessary to emphasize that in a planned economy we are primarily thinking in terms of commodities and services. Money or finance is therefore completely subservient to the requirements of the economy as a whole and must be treated merely as a means of mobilizing the internal resources of the country in materials and manpower.

Stages of Development

(89) *Determination of Stages*

In determining the stages by which the plan is to be completed, the following factors should be taken into account: (a) the extent to which natural resources, labour, capital goods, and managerial ability could be made available; (b) the necessity of giving priority to certain kinds of development over others for the success of the whole plan; and (c) the importance of avoiding too great a strain on the country's economy in the execution of the plan.

(90) *Adequacy of Resources*

Regarding (a) it may be stated that it will be an essential part of the plan to make a thorough survey of our soils, water-power resources, geological wealth, etc. On the basis of available information, which is admittedly incomplete, it is probable that most of the raw materials required for the plan outlined in this memorandum would be available within the country in requisite quantities. In respect of labour, capital and managerial ability, the situation would be somewhat different in the initial years. We have plenty of unskilled labour in the country, but in

addition to this, a large supply of skilled labour and trained technicians will be necessary. This will become available as in Russia and Poland when the schemes for their recruitment and training, which in themselves would be an important part of the plan, are complete and put into operation. But till this supply is forthcoming, India will have to import foreign technicians. The plan will, therefore, have to be arranged in such a way that the schemes undertaken in the earlier years can be carried out with a minimum of skilled labour. For capital goods, mainly machinery, India will have to depend on foreign countries for a longer time and to a larger extent than for labour; our ability to secure these from foreign countries would be determined mainly by the extent of our foreign resources. As to managerial ability, which is an important factor in modern business organization, no serious difficulty need be anticipated in rendering the country self-sufficient within a short period.

(91) Priority for Basic Industries

In carrying out the stages of development, we shall have to pay special attention to basic industries, such as the manufacture of machinery, chemicals, etc. On these industries will depend the development not only of all other industries but of the whole economic life of the country. Till these industries are developed, we shall naturally be at the mercy of foreign countries. To shorten this period of dependence it is necessary to give priority to basic industries over other industries and thus to speed up development.

(92) Needs of Consumers

Planning without tears is almost an impossibility. But we can learn some lessons from the Russian experiment and avoid the errors to which planners in their over-enthusiasm are liable. Two features of the Russian plans which caused misery and hardship to the masses were: (a) their over-emphasis on heavy industries and indifference to consumption goods industries, and (b) their enthusiasm for building huge industrial plants which took years to come into operation. It is necessary in India to pay special attention to basic industries, but it should be our aim simultaneously to develop consumption goods industries so as to meet at least our essential requirements. Similarly, we should try, as far as possible, to build our industrial units on a scale which is not larger than is strictly necessary for economic working so that they can come into production within a short time and lend themselves more easily to regional distribution.

(93) Imperfections in Early Stages

In the light of these considerations, we give in the next paragraph a rough outline of the stages by which the economic plan should be carried

out. In the nature of things, any such programme must be full of imperfections. "In the first years, indeed, only bad plans can be drawn up, since there is no stable basis on which one can rely and all the problems must be solved simultaneously. But as time goes on, the ground is cleared more and more and the number of problems diminishes."¹⁸

(94) *Three Five-Year Plans*

For purposes of execution, the plan outlined in this memorandum should be subdivided into three plans, each covering a period of five years. The expenditure to be incurred during each of these plans, as estimated in paragraph 77, is indicated below:

	<i>First Plan</i>		<i>Second Plan</i>		<i>Third Plan</i>		<i>Total</i>	
	(Rs. crores)	(£ mills.)	(Rs. crores)	(£ mills.)	(Rs. crores)	(£ mills.)	(Rs. crores)	(£ mills.)
Industry	[790]	(592½)	[1,530]	(1,147½)	[2,160]	(1,620)	[4,480]	(3,360)
Basic industry	480	(360)	1,200	(900)	1,800	(1,350)	3,480	(2,610)
Consumption goods industry	310	(232½)	330	(247½)	360	(270)	1,000	(750)
Agriculture	200	(150)	400	(300)	640	(480)	1,240	(930)
Communications	110	(82½)	320	(240)	510	(382½)	940	(705)
Education	40	(30)	80	(60)	370	(277½)	490	(367½)
Health	40	(30)	80	(60)	330	(247½)	450	(337½)
Housing	190	(142½)	420	(315)	1,590	(1,192½)	2,200	(1,650)
Miscellaneous	30	(22½)	70	(52½)	100	(75)	200	(150)
Total	1,400	(1,050)	2,900	(2,175)	5,700	(4,275)	10,000	(7,500)

(95) *Plans Explained*

In the initial period the total amount to be spent has been deliberately kept low because the material resources and personnel available at the beginning of the plan would be comparatively small. With the development of the plan, both material resources and personnel would become available in rapidly increasing proportions and the tempo of progress would be accelerated. While the first five-year plan will be handicapped by the fact that there will be no previous preparation in anticipation of its requirements, the second and third plans would have their requirements studied in advance and adequate preparations made for their inauguration. Although the first plan will therefore start almost *in vacuo*, it will lay the foundation for the second plan which in its turn will be

¹⁸ Ferdynand Zweig: *The Planning of Free Societies*, p. 125. Also see his following statement: "Every beginning in planning must be bad, and the time needed for its improvement is considerable. This point is extremely important, because the antagonists of planning experiments try to kill them at the start by airily pointing out the failures and defects inevitable during their teething stages."

the basis for the third one. In allocating the amount of capital expenditure to be incurred during each of the three stages, we are mainly guided by this consideration. To put it briefly, we have planned the expenditure to increase in geometric progression.

(96) Consideration for Consumer

The developments in the different sections of the plan have been mapped out generally in accordance with the considerations discussed earlier in this part. For instance, it will be seen that even in the first five-year plan, side by side with basic industries, we have provided a comparatively large amount of capital for the development of consumption goods industries also. The importance of this will be understood if we realize that in the first five-year plan a substantial part of this capital will have to be spent in foreign countries for importing the necessary equipment which will not be available in the country. This will mean a reduction in the limited volume of external finance which is available to us and which is essential for the establishment of basic industries. In the succeeding stages the capital equipment required by consumption goods industries would be supplied to an increasing extent by our own industries and the dependence on external finance would be reduced. It is also necessary to emphasize that in the production of consumption goods we presume that small-scale and cottage industries which require a comparatively small amount of capital equipment would play an important part.

(97) Basic Industries and Consumption Goods

The ratio between the capital outlay on basic industries and consumption goods industries over the whole period is roughly 3.5, which is much smaller than in the case of the U.S.S.R. This brings out the fact that we have given more attention to consumption goods in our plan.

(98) Progress of Basic Industries

The total expenditure on basic industries over the whole period is estimated at Rs. 3,480 crores (£2,610 millions). A large proportion of this will have to be spent on the import of foreign capital equipment. The total amount of external finance which is likely to be available to us is, however, in the neighbourhood of Rs. 2,600 crores (£1,950 millions) only. The expenditure on basic industries during the first two plans which amounts to Rs. 1,680 crores (£1,260 millions) is well within the limits of our external finance, and we presume that the basic industries which would be developed in the first two plans would be such as would themselves produce a substantial proportion, if not the whole, of the capital equipment needed for the basic and consumption goods industries to be developed in the third period.

(99) Balanced View

While fixing targets for the development of agriculture, communications, education, health and housing, we have attempted, as far as possible, to strike a balance between the requirements of each stage of development and the resources and personnel available during that stage.

Germany: Imposed Plans

Introduction

ONCE the Germans surrendered, it became the task of the Allies to plan for Germany. The main objectives were to destroy or reduce the industries which were responsible for Germany's war production; to force Germany to pay reparations for the most part of capital assets; to allow her to resume production at a level which would yield a standard of living not higher than that of *any* of her neighbors among the United Nations; to operate the German economy as a unit and to make restitution of looted property. This chapter reproduces the body of a State Department document, *United States Economic Policy toward Germany* (1946), with minor excisions. In order to get a more complete picture of planning for Germany, the reader should also consult JCS 1067: *Directive to Commander in Chief of United States Forces of Occupation Regarding the Military Government of Germany* (April, 1945); the *Potsdam Agreement*, released on August 2, 1945; *Plan of Allied Control Council for Reparations and The Level of Post-War German Economy*, April 1, 1946; and the Text of *Directive to Commander-in-chief . . . Regarding the Military Government Policies of Germany*, July 11, 1947, and State Department Release No. 711 of August 29, 1947, *Joint Statement by State and War Departments, Revised Plan for Level of Industry in the US/UK Zones of Germany*.¹

¹ The first three are reprinted as appendices in "United Economic Policy Towards Germany; and the Instructions to General Clay" in *The New York Times*, July 16, 1947. (State Dept. July 15, 1947, No. 582.) Also of help are: Office of

In 1944 and 1945, the Allies were, above all else, determined to make the Germans militarily impotent. In order to do so, it was necessary to destroy or remove more than one-half of Germany's heavy industries. With steel output in 1949 to be but 30 per cent of pre-war production, machine tools 11, basic chemicals 40, and electric power 60, the effects on the whole economy were bound to be drastic.² It was necessary, then, to re-allocate labor, management and other factors; and to re-orient export trade away from heavy industries, which had been the main source of export, to light industries.

Readjustment of Germany to a peace-time economy, albeit a truncated economy, and one concentrating on light industries and agriculture, would have been a difficult one to achieve under any conditions. Under the special difficulties of the years 1945-48, the task became almost insuperable.

First, the USSR began to show an increased interest in reparations out of current output, an interest stimulated by the disappointing results yielded by importation of factories and equipment, and by an apparent difference of interpretation with the United States on the meaning of the Yalta and Potsdam Agreements. Drains of current output intensified the difficulty confronting Germany in exporting sufficient amounts to pay for indispensable imports; and insofar as exports were not available, the other Allies, and particularly the United States, would, in fact, pay for the German imports and Russian reparations. This explains why the American delegation at Moscow insisted upon a concurrent solution of the export-import policy and reparations.

Second, the unification of Germany, one of the major targets set up under the Potsdam Agreement, had met with great obstacles: the Russians and, to some extent, the French had proved to be intransigent on unification. The resulting fragmentation or Balkanization, with its varying economic policies and excesses of vital materials in one zone and deficiencies in another, leading to unavailability of exports to serve common needs, further retarded German recovery.

Third, the Germans had lost a substantial part of their indigenous food supplies, and hence were greatly dependent on imports of foods, even though they lacked the exports required to pay for them. Whereas they had imported one-fifth of their food before the war, now they would have to import two-fifths.

Military Government for Germany: *A Year of Potsdam* (1946); The United States Strategic Bombing Survey: *The Effects of Strategic Bombing on the German War Economy* (October, 1945); and a series of statements of the Secretary of State relative to the Moscow Conference, republished in the Dept. of State: *Bulletins*, in six successive weekly issues, beginning March 30, 1947.

² Cf. War Department Press Release: *Plan of Allied Control Council for Reparations and the Level of Post-War German Economy* (April 1, 1946).

Fourth, the de-Nazification and de-cartellization programs, clearly defensible on political grounds, at least temporarily reduced Germany's production and export potential.

In 1944-45, the Allies had agreed to a policy of dismembering Germany and of making her a second-rate economic power. Only by so doing could they make her a third-rate military power. It soon became evident, however, that the costs of an economically sick Germany would fall upon the Western Allies, and notably on the United States. With Germany unable to provide the machines, coal *et hoc genus omne* required by Europe, the United States' contribution to all Europe—including Germany—would have to increase. It simply was not possible to provide Russia with plants and consumer goods, and France with adequate supplies of coal at Germany's expense without the United States, in turn subsidizing these countries.

In the American economy of 1945—47, fears revolved around inflation, an unbalanced budget, and a growing debt. Americans, fearful of rising prices and a rising public debt at home, and alarmed at Russian policy, were prepared to throw off some of the shackles imposed at Potsdam. In short, America was not willing to pay the price in dollars and goods in the years (say) 1946-50, while Germany was adjusting herself to a less industrialized economy which might yield a peaceful, de-cartellized, and de-Nazified Germany for the next 25-50 years.

On August 29, 1947, the State and War Departments after consultation with the French Government announced the *Revised Plan for Level of Industry in the U.S./U.K. Zones of Germany*.³ The plan was "designed to retain sufficient industrial capacity in the bizonal areas to permit it to become self-sustaining as soon as possible and to contribute by its exports to the recovery of Europe."

The new plan recognized that the assumptions on which the March 1946 plan for reparations and the level of industry had been based, had not been fulfilled. Under that arrangement, Germany was to retain productive capacity which would yield production equal to 55 per cent of 1938, or about 70-75 per cent of that in 1936, the latter an average year. In the August 1947 plan, the governments proposed a "capacity in the bizonal area to approximate the level of industry prevailing in Germany in 1936." Substantially, the entire difference between capacity under the 1946 and under the revised plan is accounted for by an upward revision in metals, machinery, and chemical industries, these industries to attain production potentials 5-10 per cent below 1936 levels. With population in the two zones up by 8-10 millions by 1952, the per capita industrial output would be 25 per cent below that of 1936.

In determining productive capacity, the two governments kept in

³ Dept. of State Release No. 711.

mind the target of a balanced international position for the two zones. These zones in 1936 had to pay for food imports of about \$1 billion and other imports of about \$1 billion. The international position of these areas was further impaired by the fact that prices of foods and raw materials had risen relatively to those of industrial products, and that trade with the other zones was uncertain. Germany had relied primarily on exports of machinery, steel, and chemicals to pay for their imports—hence the need for an expansion in the output of these items.

Vacillation of American policy is evident in the upward revision of the level of industry in the American-British zone discussed above; and also in concessions on the standard of living to be achieved. Consider the following:

(1) *JCS 1067, April, 1945.* You will take no action that would tend to support basic living standards in Germany on a higher level than that existing in *any one of the neighboring United Nations* and you will take appropriate measures to ensure that basic living standards of the German people are not higher than those existing in *any one of the neighboring United Nations*. . . . [My italics.]

(2) *The Reparations Settlement and the Peacetime Economy of Germany, Statement by the Department of State, Press Release, December 12, 1945.* The present determination, however, is not designed to impose permanent limitations on the German economy. [Then follows a statement that permitted industrial production will be subject to constant review.]

The Berlin Declaration furnishes as a guide to removals of industrial equipment as reparation the concept of a balanced peacetime German economy capable of providing the German people with a standard of living not in excess of the European *average* (excluding the United Kingdom and the Union of Soviet Socialist Republics). In the view of the Department of State the Berlin Declaration is not intended to force a reduction in German living standards except as such reduction is required to enable Germany to meet her reparation payments. In effect, the Berlin Declaration merely provides that Germany's obligation to make reparation for the war damage which her aggression caused to other countries should not be reduced in order to enable Germany to maintain a standard of living above the European average. The Department of State further interprets the standard-of-living criterion to refer to the year immediately following the two-year period of reparation removals. . . .

It may be assumed that the European standard of living in 1948 would approximate the *average* standard of living over the period 1930-38.

. . . . It is suggested that sufficient additional resources beyond those required to provide the adjusted output of the selected year should be left to overcome the building shortage in 20 years and to

effect repairs to structures on rail and road transport systems over 5 years.

. . . The United States does not seek to eliminate or weaken German industries of a peaceful character, in which Germany has produced effectively for world markets, for the purpose of protecting American markets from German goods, aiding American exports, or for any other selfish advantage.

(3) Text, *U. S. Instructions to General Clay on Government Policies in Germany*, July, 1947. [The War Department Release of April 1, 1946, had announced as a guiding principle the "maintenance in Germany of average living standards not exceeding the average standard of living of European countries."]

Your Government believes that the level of industry eventually agreed upon for Germany as a basis for reparation removals, while eliminating excess industrial capacity which has been used by Germany for the purpose of making war, should not permanently limit Germany's industrial capacity. The German people after the period of reparations removals should not be denied the right consistent with continued disarmament, to develop their resources for the purpose of achieving higher standards of living.

United States Economic Plans for Germany: Introduction ⁴

The fundamental documents concerning economic and other aspects of United States policy toward Germany are the directive issued in April 1945 by the Joint Chiefs of Staff to the Commander in Chief of United States Forces of Occupation (later referred to as JCS 1067) and the Potsdam Agreement announced the following August. They correspond to the two planes on which policy has moved thus far. The Potsdam Agreement is tripartite policy for Germany as a whole, further developed and implemented through the Allied Control Council in Berlin. It contains only provisions on which the Soviet Union, the United Kingdom, and the United States have agreed. The Control Council, composed of representatives of these countries and of France, can act only by unanimous vote of its members, who are also commanders of the four zones of occupation. But each commander has complete responsibility for the Military Government of his zone and therefore must make decisions on many matters, even if the Control Council has not reached

⁴ Dept. of State: *United States Economic Policy Toward Germany* (Publication 2630, European Series 15, Washington, D.C.), 1946, pp. 1-50, with some omissions.

agreement respecting them. JCS 1067 accordingly states United States policy more fully for the guidance of the United States Commander and is still valid to the extent that it has not been modified by the provisions of the Potsdam Agreement. The discussion which follows will consider United States policy and its execution both as it applies to Germany as a whole and as it applies to the United States zone.

Economic policy toward Germany has three main themes: disarmament, reparation, reconstruction. The first two are corrective measures: Germany is to be deprived of the economic basis for war and is to compensate the Allies as far as possible for the damage caused by German aggression. The third theme is constructive: Germans are to be "given the opportunity to prepare for the eventual reconstruction of their life on a democratic and peaceful basis." The initial economic elements of such opportunity are a living standard not exceeding the European average and ability to subsist (including the ability to pay for essential imports) without external assistance. It is important to note that the economic policy of the Potsdam Agreement is both corrective and constructive.

Disarmament calls for elimination of war potential, but opportunity for reconstruction entails retention of productive capacity sufficient to meet "approved post-war peacetime needs." The apparent conflict is resolved by a shift in the economic pattern of Germany, including imports and exports. This shift reduces heavy industry, maximizes agriculture, and permits a relatively large amount of light industry. Enough of the latter is retained, together with mining, to produce sufficient exports to balance the imports, especially food and industrial raw materials, which are necessary to meet approved needs. Reparation appropriates the difference between present resources and those to be retained.

United States Economic Plans for Germany: Level of Post-war German Economy

The crucial point in implementing the whole economic aspect of the Potsdam Agreement consists in determining what level of production is requisite for peace-time needs and what shift in the economic pattern will reconcile these requirements with those of disarmament. On March 28, 1946, the Allied Control Council published its decision, prescribing the general level of industrial capacity, its pattern—which industries are to be prohibited, which restricted and how much—and also the balance of exports and imports. This plan paves the way for carrying out the Potsdam Agreement along all three of the main lines of economic policy—disarmament, reparation, opportunity for reconstruction. It represents probably the greatest single achievement of the Control Council in the first year of occupation.

Quadripartite negotiations on the level of German economy began soon after the Potsdam Agreement was announced. Some difficulties naturally arose from differing national points of view represented on the Control Council. The British favored relatively lenient interpretation of the Potsdam Agreement in order to prevent Germany from being a continued drain on Allied treasuries and in order to permit rapid economic recovery, both for the sake of indirect benefits to other countries and for the sake of encouraging the development of peaceable and democratic institutions within Germany. The Soviet view advocated a relatively low level of German economy in order to permit large reparation removals and to keep Germany comparatively weak for security reasons. The final agreement achieved a compromise; relatively low capacities were fixed for heavy industries like steel which are most directly related to war potential, but very substantial capacities were left in light industries which serve only peaceful ends.

Other difficulties were technical. The Potsdam Agreement specifies "average living standards not exceeding the average of the standards of living of European countries," excluding the United Kingdom and the Union of Soviet Socialist Republics. One problem accordingly lay in estimating the probable European average for 1949, the year when reparation removals are to be completed. The European average for the years 1930-38 seemed a reasonable goal for 1949. Real incomes per capita, i.e., the actual amounts of goods and services obtained, were averaged for those years. The result was taken as the basis for calculating the amount of productive capacity to be retained in Germany.

Further technical difficulties arose in connection with specifying capacities of particular industries so that the desired reduction of war potential could be reconciled with requirements for the average living standard as calculated above. This was complicated by the interdependence of industries. Once the steel figure was set, the effect of this upon other industries using steel had to be taken into account. Similar cross-effects were involved in the limitations on basic chemicals, such as nitrogen and calcium carbide. Allowances had to be made also for such necessities as rebuilding destroyed housing within a reasonable period—twenty years were allowed for this—and repairing the transport system. These are some of many factors that had to be considered.

Of the resulting levels as finally negotiated, the prohibited group includes armament industries and other industries closely related to war, such as those producing aircraft, seagoing ships, synthetic gasoline, aluminum, and radioactive materials. Annual steel production capacity is limited to 7,500,000 ingot tons, actual production to 5,800,000, the latter subject to annual review. Basic chemical capacity will be reduced to 40 per cent of the 1936 figure, but 70 per cent of 1936 capacity will be retained for other chemicals. Only 11.4 per cent of the 1938 machine

tool capacity is to be retained. Other industries restricted because of their relation to disarmament and reparation are machine-manufacturing and engineering, transport-engineering, agricultural-machinery, precision-instruments, cement, and electric-power. The plan calls for maximum coal production and estimates levels in that and other unrestricted industries necessary for the specified level of economy in 1949. It also provides for an export-import balance of three billion reichsmarks (1936-value) for 1949. The general level of industry thus planned for 1949 is about 50 to 55 per cent of the pre-war (1936 and 1933) level in mining and manufacturing, excluding the building and building materials industries. If the latter—which are not limited except for cement—are included, the level planned for 1949 is somewhat higher and amounts to approximately 135 per cent of the 1932 depression level.

The reduction from 1936 and 1938 levels will have less effect upon the German consumer than the percentages suggest because the German economy in those years was heavily geared to war preparations and therefore achieved production totals far higher than would correspond to the standard of consumption actually enjoyed by German citizens. The same consideration holds for the export-import balance. Even in 1936 a great part of German imports was devoted to making armaments and accumulating war reserves.

In general the level-of-industry plan is to be considered not as the result of omniscient calculations but as the practical outcome of negotiation and compromise, enlightened by the best expert study and judgment that could be obtained at the time. Some such working agreement had to be made in order to get on with reparation.

Certain factors of flexibility in the plan permit adjustment to unforeseen circumstances. For example, the repair or replacement of war-damaged buildings can be stretched over a longer period; steel production can be adjusted upward as much as 29 per cent within the limits of retained capacity; and the output of many industries can be increased by working two or three shifts.⁵ If such adjustments prove inadequate, the whole plan can be reviewed. The possibility of review is indicated by the fact that the plan itself states certain assumptions on which it rests, to wit, that the population of Germany will be 66.5 million, that Germany will be treated as an economic unit, and that German exports will find a market.

⁵ With respect to the capacity determinations used in applying the level-of-industry plan, the Control Council has agreed that three shifts are to be worked in such heavy industries as steel and basic chemicals; two shifts in heavy mechanical and electrical engineering, hot forging and pressing of metals, transport engineering and chemicals having direct war potential; and "normal pre-war shifts," meaning usually one shift, in all other industries.

United States Economic Plans for Germany: Corrective Measures

Economic Disarmament

A balanced conception of all Allied policy toward Germany must begin with the determination of the Allies "to ensure that Germany will never again be able to disturb the peace of the world." The language of both the Yalta and the Potsdam Agreements gives clear priority to this purpose.

The economic aspect of disarmament was included in the Yalta Agreement and elaborated at Potsdam. The level-of-industry plan opens the way for removing Germany's industrial base for future aggression. Other features of economic disarmament include seizing external assets, patents, and technological secrets; breaking up undue concentrations of economic power; and removing from key business positions those persons who would be most disposed to evade disarmament controls.

The necessity for drastic measures is based on the way in which Germany mobilized her total economy to build her last war machine, plus the danger that she might repeat the performance in a few years if her present resources were left intact. By skillfully exploiting her one major resource, coal, she enormously expanded production before and during the war, particularly in the fields of metallurgy, machinery, and chemistry. Steel production, for instance, which averaged 12 to 13 million tons annually for the years 1929 to 1937 inclusive, increased to more than 22 million tons in 1938. The rate of overall industrial production, based on 100 for 1928, was 61.2 in 1932, but rose to 141.5 in 1938. Science and engineering were used to develop synthetic rubber and oil and other substitutes for materials that could not be procured after war began. Through patent and trade arrangements and acquisition of industrial interests in other countries Germany was able both to obtain certain products which she lacked and to restrict other nations' production of many materials critical to modern warfare.

(a) *Industry.* Though industrial surveys of Germany are in progress, exact figures on present capacity are not yet available. It is known, however, that the bulk of Germany's war-expanded plant is either ready for operation or reparable within a short time. For example, at the war's end there were over two million machine tools in Germany, roughly as many as in the United States and twice as many as in pre-war Germany. The United States Strategic Bombing Survey reported that in 1944, the year during which the tonnage of bombs dropped on industrial targets was greatest, less than seven per cent of all existing machine tools was

destroyed or damaged by air raids. The same survey discovered that comparatively little damage had been done to major productive facilities of the steel industry; it attributed loss of output caused by air raids to damage of transportation and other auxiliary facilities rather than of furnaces and machines. Thus, despite the ravages of bombing and invasion, German industrial capacity is still far greater than that needed to maintain a normal peacetime economy.

Reduction of capacity to peacetime proportions has now been made possible by the level-of-industry decision. The reduction of German industrial capacity to fit this pattern will be carried out chiefly by reparation removals, discussed below. Only surplus capacity not wanted for reparation will be destroyed.

(b) *External Assets.* Industrial plant within Germany is by no means the whole of Germany's economic base for renewed aggression. Even before the war German investments and deposits in other countries were large. Toward the close of the war the Germans transferred as much capital as possible, under various forms of disguise, to neutral countries for the purpose of escaping Allied controls and eventually restoring German power. Allied restrictions were evaded in this way after World War I. Similar moves were accordingly anticipated this time, and systematic plans were laid long before the end of the war for tracing German external assets and assuming complete Allied jurisdiction over them.

The United Nations announced their intentions in this regard in the Inter-Allied Declaration of January 5, 1943, the Gold Policy Declaration of February 22, 1944, and Resolution VI adopted at the Bretton Woods Financial and Monetary Conference July 22, 1944. These policy declarations formed the basis for comprehensive detailed demands concerning the control of enemy external assets and persons made to the continental European neutral countries simultaneously with the military defeat of Germany. Each of the neutral countries has to some degree acquiesced to these demands by blocking enemy assets, arranging for a census of them, and committing themselves to the restitution of property looted by Germany from occupied areas of Europe. Practically all diplomatic and consular property belonging to the fallen German Government has been surrendered to Allied jurisdiction, and in certain neutral countries the Allied Governments have assumed control of a substantial amount of German private property. Agreement with regard to German holdings in Switzerland and gold received by Switzerland from Germany was announced on June 17, 1946. German assets in Allied countries have, of course, been sequestered wherever identified and will be given as reparation to the country in which they are located.

(c) *Patents, Industrial Secrets, and Research.* The United States, together with other occupying powers, has been acquiring the fundamental scientific and technical information available in Germany and is disclosing all information bearing on industrial techniques for the benefit of the world, including those nations receiving in reparation plants which require these techniques for their operation. With regard to German patents outside of Germany, United States policy has been (1) to terminate promptly all German interests in such patents and (2) to seek multilateral agreement to the effect that, as a general rule, all Allied nationals be given access in Allied countries to German patents which exist in those countries, preferably on a royalty-free basis. The United States Government has opened German patents held in this country for use by citizens on this basis and is willing to release them to the nationals of any other country which will take reciprocal action.

The Potsdam Agreement provided for control of all research connected with economic activities. This has been implemented by Law No. 25 for the control of scientific research, adopted by the Control Council on April 29, 1946. The law prohibits both fundamental and applied research in matters primarily related to military uses, lists nine prohibited subjects of applied research and ten general categories of chemicals on which research is unlawful. It also lists chemicals on which research is permitted relating to methods of utilization but not to methods of production and indicates subjects of applied research for which prior approval of Military Government is required.

Thus by the seizure of existing patents and secrets Germany's former military resources in this field have been eliminated, and by the control of research Germany is to be prevented from technological rearmament.

(d) *Economic Institutions.* Cartels and combines served as tools for mobilizing the German war economy and for penetrating the economies of other countries, in order to aid German rearmament and to cripple intended victims. Article III, paragraph 12 of the Potsdam Agreement accordingly states, "At the earliest practicable date, the German economy shall be decentralized for the purpose of eliminating the present excessive concentration of economic power as exemplified in particular by cartels, syndicates, trusts and other monopolistic arrangements." Negotiations for a law to execute this policy are being conducted in the Allied Control Council, the principal issue being whether disestablishment shall be mandatory for combines falling within certain criteria—of size, for example—or shall be left to the discretion of administrators. In November 1945, the Control Council handled the case of the mammoth I. G. Farbenindustrie individually by enacting Law No. 9, the provisions of which include seizure of property and termination of cartel relationships.

Pending comprehensive action by the Control Council, the Commander of United States Forces in the European Theater has been decentralizing the German economy in the United States zone in accordance with paragraphs 36 and 37 of JCS 1067. A directive issued for the administration of military government detachments on July 7, 1945 provided for the prohibition of cartels and cartel-like arrangements. A directive of October 8, 1945 formulated principles under which trade organizations might be re-established in conformity with anti-cartel policy. In order to assist the United States Government in its policy of dispersing the ownership and control of German industry, a survey of combines, mergers, holding companies, and interlocking directorates is being conducted in the United States zone. The results will be forwarded to Washington with recommendations for most effective action.

(c) *The Problem of Long-Term Limitations.* The Potsdam Agreement formulates Allied policy "during the period of Allied control," thus leaving open the question of more lasting limitations to be imposed on the German economy in connection with peace treaties. In a statement issued for publication on December 12, 1945, the Department of State took the position that the determination of the post-war level of German industrial capacity is to serve as the basis for reparation removals, not to impose permanent limitations on the German economy.

The need for limitations of some sort at the termination of military occupation is suggested by the possibility that, even after loss of external assets and surplus industrial capacity, Germany might again start expanding her economy in a warlike direction once Allied controls were removed. United States policy on finished armaments and aircraft is presented in the draft of a twenty-five year treaty submitted by the Secretary of State to the Council of Foreign Ministers in Paris on April 29, 1946. The character and extent of other long-term economic limitations will depend on German performance in the meantime—on how satisfactory a government has been formed, how real a start has been made toward creating a Germany fit to re-enter the family of peaceful nations.

Reparation

(a) *General Nature of the Reparation Program.* The Yalta Agreement stated the moral basis of the claim for reparation and determined that reparation should be in kind: "We have considered the question of the damage caused by Germany to the allied nations in this war and recognized it as just that Germany be obliged to make compensation for this damage in kind to the greatest extent possible." The extent and methods of reparation were subsequently discussed by the Allied Commission on Reparation which met at Moscow. General principles, based upon these discussions, were finally formulated in the Potsdam Agree-

ment. These principles embodied United States proposals to a very large degree.

The significant features of the reparation program may be shown by a comparison with reparation after World War I. Reparation is to be in goods rather than mostly in money, thereby avoiding difficulties connected with monetary exchange. Specifically, it is to consist of a transfer of capital, principally industrial equipment and external assets. This permits rapid completion, avoids the danger of gradual postponement and ultimate default, and permits early concentration on the long-term tasks of reconstruction. At the same time it accomplishes major objectives of economic disarmament and gives prompt and tangible aid for devastated areas.

To ensure speed the Potsdam Agreement provides that all removals of industrial equipment shall be completed within two years after determination of the amount to be removed from the western zones. The level-of-industry plan constitutes the first of the major steps toward this determination. Remaining steps are allocation of productive capacities by zones, completion of zone surveys, and designation of factories to be retained and factories to be removed. In order to expedite matters further, the Potsdam Agreement provides for advance deliveries of equipment declared surplus to peacetime needs, without waiting for total available amounts to be fixed. By March 1, 1946, 372 plants had been declared available for reparation in the western zones, and a number had been or were in process of being dismantled. But in May a halt was called to further dismantling in the United States zone pending attainment of the economic unity of Germany called for in the Potsdam Agreement.

The total value of German external assets has been estimated roughly at two billion dollars. To facilitate control for reparation purposes, the Allied Control Council on October 30, 1945, enacted Law No. 5 establishing a German External Property Commission and vesting in it all German external assets. Proposals are now being formulated by the interested Allied governments calling for the unqualified recognition of this law by the neutral governments concerned and establishing appropriate machinery through which German assets in neutral countries may be utilized for reparation. Assets in Allied countries will likewise be utilized in the process of settling reparation accounts, according to the plan for dividing reparations discussed below.

(b) *Shares in Reparation.* The Potsdam Agreement establishes the main lines along which reparation will be divided as follows. The Soviet Union is to settle the claims of Poland from its own share of reparation. It is to get the industrial capital equipment removed from the eastern zone and the German foreign assets in Bulgaria, Finland, Hungary, Ru-

mania, and eastern Austria. In recognition of the fact that a disproportionate share of Germany's industrial plant is situated in the western zones, the Soviet Union is also to receive 25 per cent of the industrial capital equipment to be removed from the western zones, 10 per cent of this to be transferred without payment and 15 per cent to be exchanged for an equivalent value in commodities. Remaining equipment and foreign assets are to be shared by all other countries entitled to reparation.⁶

The shares in reparation of countries other than Poland and the Soviet Union were defined by the Paris Conference on Reparations. The final act of the Conference, adopted on December 21, 1945, is included as appendix H. It specifies percentage shares as between 18 claimant nations, formulates principles of allocation, and establishes the Inter-Allied Reparation Agency to make allocations and serve as a channel of information.

The United States received an allocation of 28 per cent of the reparation assets divided by the Paris Conference other than capital equipment (merchant ships, and inland water transport. The United Kingdom also received 28 per cent; France, 16 per cent; all others, less. As to capital equipment, merchant ships, and inland water transport, the United States was allocated 11.8 per cent, after voluntarily relinquishing 16.2 percentage points to the greater need of other claimants. The United Kingdom was allocated 27.8 per cent of this category; France, 22.8 per cent; all others, less.

(c) *Reparation and Current Production.* The problem of reparation is complicated by the fact that the German economy is not self-sufficient and therefore requires imports of food and other essentials, both to sustain the agreed standard of living and to meet local costs of the occupying forces. Since all German external assets are earmarked for reparation, and the looted gold uncovered in Germany has to be restored to the countries from which it was taken, exports based on current production are the only means whereby Germany can be self-supporting. Therefore if exports were also claimed as reparation, the occupying powers would have to pay for the essential imports and thus would indirectly be paying Germany's bill for reparation. The United States in particular has no desire to repeat, in different form, the experience undergone after World War I, when Germany paid reparation out of the proceeds of American loans and investments, then defaulted on the lat-

⁶ The German merchant marine has been divided between the eastern and western countries by a Tripartite Merchant Marine Commission set up in accordance with the Potsdam Agreement. The western share will be subdivided along with other assets under terms fixed by the Paris Conference on Reparations explained below. Inland water transport will be transferred in restitution, discussed in the next section.

ter. Almost from the beginning of the present occupation, the United States and other occupying powers have been obliged to import into Germany at their own cost a considerable volume of food and some medical and sanitary supplies for the purpose of preventing starvation and disease. It is thus essential to put Germany as rapidly as practicable on a self-sustaining basis.

This problem was foreseen and provided for in article III, paragraph 19 of the Potsdam Agreement, which states: "Payment of reparations should leave enough resources to enable the German people to subsist without external assistance. In working out the economic balance of Germany the necessary means must be provided to pay for imports approved by the Control Council in Germany. The proceeds of exports from current production and stocks shall be available in the first place for payment for such imports." To implement the last clause, known as the "first charge principle," the Control Council agreed on September 20, 1945 that each zone commander should require payment for exports (other than reparation removals) made since August 1, 1945, such payment to be for not less than 80 per cent of the price of the exports. Payment was to be in United States dollars or other currency acceptable to the Control Council. The export proceeds were to be credited to a special account of the Control Council and used for the payment of imports.

Details of the arrangements whereby the proceeds from exports would be applied to payment for imports have not been finalized. This difficulty, however, has not been allowed to delay the initiation of an export program. Considerable exports of coal, as well as lesser quantities of other materials, have been made and the proceeds held pending settlement of certain details. The principal difficulty has been lack of agreement on a general export-import plan and on central machinery to coordinate exports and imports for Germany as a whole. Since capacity for exports and need for imports are very unequally distributed among the zones, the problem can be solved only by treating Germany as an economic unit—a provision of the Potsdam Agreement which has not yet been carried out.

Other obstacles to implementing the first charge principle have been: the position taken by the Soviet Union that the reparation removal program must be settled first; the difficulty importing countries find in securing United States dollars to make payments; and the natural reluctance of nations which suffered from Nazi aggression to pay for German goods. Representatives of twelve countries at the Paris Reparation Conference approved a resolution expressing the hope that some reparation out of current German production and stocks would be forthcoming, but the conference did not make specific recommendation to that effect.

The first charge principle remains a part of United States policy, and continuous efforts are being made to overcome the difficulties inherent in its application. It is hoped, in particular, that the level-of-industry agreement will make possible an early agreement on a quadripartite foreign trade authority and an export-import plan for Germany as a whole.⁷

United States Economic Plans for Germany: Constructive Measures

Toward a Peacetime Economy

As economic disarmament, reparation, and restitution are progressively accomplished, more attention is being given to the complementary problem of enabling Germany to develop a peace-time economy that will sustain the general reconstruction of German life on a peaceful democratic basis. The Potsdam Agreement adopts this as a long-range objective of Allied policy. It is recognized that democratic and peaceful inclinations will have little chance of developing unless the economic foundations are properly laid.

Unlike the corrective aspects of economic policy, which for the most part can be imposed by force if necessary, the constructive aspects consist necessarily in measures which place final responsibility on the Germans. The level-of-industry plan, for example, provides for retention of enough plant to sustain an average standard of living, but whether the plant is used energetically enough to attain that standard depends upon German initiative.

In reactivating their economy along permitted lines, the Germans face certain problems imposed by the consequences of the war as well as by Allied decisions. The concentration of the occupying powers upon disarmament and reparation has resulted in comparatively minor interference with the reactivation of the German economy, and that chiefly through additional demands made upon transportation. Present German hardships and problems are in much greater degree direct consequences of the war—the degree to which the whole nation was mobilized for total war, the vast physical destruction caused by Nazi tenacity in fighting to the bitter end, the complete collapse of public and administrative services as Germany was overrun, and the large-scale movements of refugees and displaced persons.

Major changes in area, natural resources, and population have resulted from the change in the eastern boundary of Germany and the transfer of German minorities from Poland and Polish-administered areas, Czechoslovakia, Hungary, and Austria to Germany. They form

⁷ Chapter 3 deals with restitution of stolen property. It is omitted here.

the framework within which the Germans must reshape their economy along the lines laid down in the level-of-industry plan and constitute an additional demand on German initiative in achieving a viable economy. These changes were taken into account in the calculations on which the level-of-industry plan was based. If, however, the German population turns out to be larger than assumed, corresponding adjustments will have to be made.

Economic Unity

The level-of-industry plan is expressly based on the assumption that Germany will be treated as a single economic unit. The Potsdam Agreement, article III, paragraph 14, provides that Germany shall be so treated during the period of occupation and that to this end common policies shall be established with respect to mining and industrial production and allocations; agriculture, forestry, and fishing; wages, prices, and rationing; import and export programs for Germany as a whole; currency, banking, central taxation, and customs; reparation and removal of industrial war potential; and transportation and communications. Paragraph 9 of the same article provides that certain essential German administrative departments, headed by state secretaries and functioning under Control Council direction, are to be established, "particularly in the fields of finance, transport, communications, foreign trade and industry."

These provisions have remained largely a dead letter. The German economy is still operated on a zonal basis, with only a small degree of co-ordination by the Control Council. Machinery has been set up for common allocation of the limited quantities of merchantable coal and steel available in Germany, and some co-ordination has been achieved in the revival of interzonal and international postal communications. Otherwise the zones have separate policies and administrative agencies for production, pricing, and banking. Little progress has been made toward removing barriers to trade between the zones or toward working out an export-import program for Germany as a whole.

As a result, economic revival has been slow and uneven, and the burden on the occupying powers correspondingly large. In the British and Soviet zones the policy has been to speed industrial revival, though in different ways. In the United States zone, JCS 1067 forbids the commander to aid in rehabilitating the German economy except for certain limited purposes. The United States zone lacks coal. The French and British zones have coal but lack food. The Soviet zone has food and brown coal, lacks iron and steel. The chart on page 33^{*} shows how greatly the zones differ in arable land, natural resources, and industrial

^{*} Omitted here.

capacity in relation to population. These factors supplement each other when the country is treated as an economic unit. They cannot do so when the economy is partitioned into zonal compartments.

The failure thus far to carry out this fundamental feature of the Potsdam Agreement is due to more than one cause. Negotiations between the occupying powers necessarily concentrated first on economic disarmament and reparation. Until agreement was obtained on the level of industry to be retained in Germany, it was impossible to devote much attention to other subjects, such as policies for reactivation of the remaining industrial capacity. Other formidable difficulties still exist. Some are inherent in the basic differences in economic and social philosophy among the occupying powers. Others are due to disagreement on other European issues and to the uncertainty which attaches to Germany's future status in Europe as a whole.

One of the difficulties has been the unwillingness of France to agree to the establishment of the necessary central German administrative agencies lest these pave the way for Germany to become a strong and aggressive power once more. The French were not among the signatories of the Potsdam Agreement and therefore have the legal right to withhold approval on this point. They have indicated willingness to reconsider only if the other powers would agree to sever the Ruhr-Rhineland-Saar area from Germany and place the Ruhr under an international regime. They assume that the Oder-Neisse line will become the permanent eastern frontier of Germany and see no reason for deferring a similar boundary settlement in the West.

Another crucial but more recent difficulty has been the reluctance of the Soviet Union to agree to a common policy regarding imports and exports for Germany as a whole, involving the pooling of proceeds of exports from the four zones, the sharing of deficits, the application of the first charge principle, and the maximization of interzonal trade. So long as proceeds of exports in any one zone do not have to be pooled, the tendency is inescapable to maximize foreign trade and reparation out of current output (if the imports into the zone have been paid for) at the expense of interzonal trade. This tends to separate the four zones economically and to make the continuance of foreign-exchange deficits in the poorer zones a certainty.

At the Paris meeting of the Council of Foreign Ministers, April 25 to May 16, the Secretary of State asked that special deputies be appointed to draft a peace settlement for consideration at a general Allied conference and to report to the Council of Foreign Ministers on the pressing economic and boundary problems. The Soviet representative, however, was not willing to agree to the proposal without further study.

At the second Paris meeting of the Council of Foreign Ministers,

economic unification of Germany was again urged, without success. As a last resort, pending action by the four powers to carry out the Potsdam Agreement in this respect, Secretary Byrnes stated to the Council on July 11, 1946, that the United States would join with any other occupying governments in Germany for the treatment of their respective zones as an economic unit and that the United States representative on the Control Council would be instructed to act with the representatives of any other occupying governments in implementing this proposal and establishing the necessary German administrative machinery. The purpose of the proposal, he explained, was not to divide Germany but to expedite its treatment as an economic unit. The arrangement would be open on equal terms at any time for the participation of any government which did not participate in the beginning. Within the following month, the United Kingdom accepted the proposal in principle, while France and the Soviet Union declined.

The question of economic unity is fundamental, not only to the nature of the German peace-time economy but also to the interdependent programs of reparation and economic disarmament. Either a major change in boundaries or a persistent failure to achieve unified coordination would require drastic revision not only of the level-of-industry agreement but also of the basic economic policy laid down in the Potsdam Agreement. Each zone or other separate area would have to be studied with a view to its requirements as a relatively independent economy; the amount of industrial capacity required for self-support would be correspondingly greater, and the amount removed for disarmament and reparation correspondingly less. For this reason dismantling of plants in the United States zone was discontinued in May 1946, until the question of economic unity could be settled.

Stages of Recovery

In a statement on December 12, 1945, the Secretary of State outlined three roughly definable stages in the return of Germany to normal economic conditions under the Potsdam Agreement. The first stage has seen virtually no industrial activity, and principal emphasis has been on meeting immediate problems, especially those of Allied countries, and on setting up the machinery for reparation and industrial disarmament. As a necessary complement to the functioning of such machinery along agreed lines, it was expected that this stage would include setting up the central German administrative agencies discussed above.

The second stage, expected to last from 1946 to 1948, involves completion of reparation removals and simultaneous reactivation of plants marked for retention. With the elimination of various delaying factors incident to the first stage, industrial reactivation should proceed much more rapidly, although the world food situation may slow it somewhat,

especially in the period immediately before the 1946 harvest. German coal production should increase substantially by the end of 1946, and it is to be hoped that the transport situation will improve in proportion. It is unlikely that German production will provide sufficient exports to finance the full volume of necessary imports in the early part of this stage, but continuing expansion of production should bring Germany nearer to that goal. In general, progress during the second stage depends upon whether the central economic agencies, which should have been instituted toward the close of the first stage, are finally established. By the close of the second stage the German economy should have assumed the general shape implied in the level-of-industry plan.

In the third stage, beginning when reparation removals are completed, the Germans should gradually regain control of their economy and be able to use their resources, within limitations fixed by the occupying powers, to improve their standard of living.

Immediate Problems

The outstanding problems of the early stage of German economic revival have been the primitive ones of food, transport, fuel, and shelter. These had to be provided in some fashion without waiting for disarmament and reparation issues to be settled. But since similar problems were faced by other European countries, it has been Allied policy to give priority to the needs of liberated areas, especially for imports of food and coal. This policy was based upon the provision in the Potsdam Agreement that during the period of occupation the German standard of living should not exceed the average standard of other European countries. The Agreement authorized early measures for rehabilitation only with respect to essential repair of transport, emergency repair of housing and essential utilities, enlarging coal production, and maximizing agricultural output.

Considerable progress was made along these lines in the early months of occupation. One of the first tasks of Military Government was to see that transport and utilities were repaired as well as circumstances would permit. By February 1946, approximately 96 per cent of first-line railroad trackage in the United States zone was available for operation, and a large-scale heavy repair system was keeping the supply of serviceable rolling stock fairly constant. An emergency shelter program, consisting chiefly in effecting emergency repairs with local salvage materials and rationing available space, brought the average number of persons per room down to 1.6 in the United States zone by January 1946.

(a) *Food.* German agricultural production must remain below normal for some time, owing to such factors as the cumulative soil deficiency produced over a period of years by the diversion of important

fertilizer elements into munitions. However, immediate steps have been taken in the United States zone and elsewhere to make food production as large as possible under the circumstances, for example by enlarging the area devoted to direct consumption crops and increasing the proportion of high-yielding crops such as potatoes and sugar beets.

In any case it was apparent at the outset that, since Germany has never been self-sufficient in food, western Germany at least would depend heavily on imports, financed initially by the occupying powers. The Allies agreed that no punitive conception should govern the level either of imports or of the German ration scale. These have been, and must continue to be, determined by the world supply situation. Within the United States zone a structure of ration categories was set up, under which—by the end of 1945—the normal consumer in a German city received a daily ration of 1,550 calories, and to this he was able to add about 400 calories from other than rationed foods. This was a reasonable level compared with standards elsewhere in Europe and permitted the Germans to sustain life and health.

In the early months of 1946, however, it became clear that the world was faced with a desperate food situation, particularly for the period before the 1946 harvest. Famine appeared likely in widespread areas, and the situation in liberated countries, also dependent upon imports from the limited world grain pool, was getting worse. For these reasons it was necessary to cut the ration in western Germany. A corresponding cut was not necessary in the eastern zone because the ratio of agricultural resources to population is more favorable there. Hope remains that the precarious period before the harvest can be passed without mass starvation in the western zones. The Germans were well fed throughout the six war years and should therefore stand a low diet better than those who fared less well during the war.

(*b*) *Coal.* As food is the most immediate problem in preserving life, coal is the prime necessity for reactivating industry and transport, not only in Germany but throughout Europe. The production of all merchantable solid fuels has followed a similar pattern. During the second half of 1945 it increased rapidly, but hopes for a continued rise in 1946 have not yet been realized. There are less than half enough miners to operate the mines at capacity, and the miners are only half as productive as in pre-war days. Inexperience, housing difficulties, and lack of mining supplies such as steel and pit props are major reasons for the decreased productivity of labor. Since the first of March the worsening food situation has caused a decline in production.

Germany is normally a coal surplus area on which western Europe, Italy, Austria, and Czechoslovakia partly depend for their supplies. She could have enjoyed a more rapid economic revival than most neighbor-

ing countries had she been allowed to meet local needs fully before making exports. But Allied policy has been to give liberated areas economic priority over Germany in the initial post-war period. Accordingly, in July 1945, President Truman, General de Gaulle, and Prime Minister Attlee issued a directive to their military commanders in Germany to the effect that coal exports from Germany to liberated areas be maximized during the period from August 1945 to April 1946. . . .

Long-Range Problems

Though the immediate post-war problems of the German economy have been dealt with fairly successfully on a zonal basis, the long-range problems depend for their solution on the treatment of Germany as an economic unit, unless the entire trend of Allied economic policy is to be revised. Reactivation of industry in the United States zone, for example, has gone about as far as it can under present limitations and is in fact beginning to recede because the progress hitherto achieved depended on using up existent stocks of raw materials. The discussion which follows assumes the framework of the Potsdam Agreement respecting economic unity. If that condition fails to be realized, all problems will assume a radically different aspect.

The long-range problems are those involved in achieving the second and third stages of economic recovery, whereby production is remodeled to fit the level-of-industry plan, the labor force appropriately re-deployed, agriculture intensified, and a balanced system of exports and imports achieved. If in this way the Germans attain the European average standard of living and are able to hope and work for a rising standard in the future, along with the rest of Europe, the constructive economic purpose of the Potsdam Agreement will have been fulfilled.

(a) *Management and Labor.* The shift in emphasis from heavy industry to light industry and agriculture will require a corresponding shift in managerial talent and labor, with the necessity of acquiring new skills and training.

Substantial gaps in the ranks of business and industrial management, especially at the higher levels, have resulted from the Allied policy of removing Nazis and militarists from influential economic positions. In the period ending March 31, 1946, 68,833 persons of the 278,070 in business and industry who were screened in the United States zone were removed from their jobs. The task of directing and administering the changes in the German economy arising from war dislocations and the level-of-industry plan will fall upon the Germans. One of the decisive factors determining their success is likely to be the quality of the new management developed to fill the gaps.

Another no less important factor will be the initiative exhibited in

planning, training of labor, and direction of labor to the appropriate work. No pattern of use for resources, land, labor, and capital is fixed and undeviating. The old German pattern is being changed—in the first instance by the dislocations and losses of war, in the second by the level-of-industry plan. It will tax ingenuity and good management to create a new pattern which employs fully the resources remaining in Germany.

The redistribution of labor required is the last stage in a series of labor shifts and diversions which began when Hitler started to rearm Germany. In the period of preparation for war, full employment was achieved by expansion of output in heavy industry and military construction. During the war German workers served in the armed forces while foreign labor was brought in to maintain industrial and farm production. At the end of the war these "displaced persons" were returned to their homes; some German soldiers were demobilized and became once more available for employment, while others remained prisoners of war, and a large number had either been killed or disabled. With the final addition of Germans who had been living in other countries such as Poland, Czechoslovakia, and Austria, Germany now has its post-war labor force, disproportionately large in women and older men, and must attempt to fit it to the types of economic effort possible in post-war Germany.

The problem is thus to accomplish reconversion from war production to the new pattern of peaceful production, which is heavily weighted toward light industry and agriculture, with a labor force drastically altered in composition. The various aspects of the problem are beginning to appear. Today production in the industries most important for the reactivation of the German economy lags for lack of labor with appropriate skills. Coal mining, forestry, and construction labor are short. On the other hand, unemployment exists among certain classes of labor trained for work which is not needed at the present low levels of economic activity or which will be limited by the level-of-industry plan. It is particularly high among clerical, administrative, and commercial workers.

An approach to the solution of the problem requires that the Germans adapt the machinery and equipment they will have when reparation removals are completed to the use of larger numbers of workers. They will need also to train workers for jobs in fields requiring less capital equipment, expanding employment in agriculture, construction, land rehabilitation, and similar fields, and in the peaceful industries upon which no limitations were imposed by the level-of-industry plan. The Germans will have to invest in this peaceful task a large measure of vigor and imagination comparable to their war effort if they are to do what is required.

(a) *Agriculture.* Owing to the reduction in German territory, it is doubtful that German farm population and cultivated acreage can be raised to the level obtaining in pre-war Germany. This, with the transfer of population from the East, means a greater reliance upon imports for food. However, improved agricultural methods and a more intensive employment of labor can effect some increase in production. Also the present acreage under cultivation can be increased. For example, some tracts of moor land can be reclaimed by suitable drainage, and land formerly reserved for military training—amounting to three per cent. of the total area in the United States zone—is being returned to agriculture.

The chief requisites for restoring production are fertilizer and farm tools and machinery. Manufacture of fertilizer is now given high priority in the United States zone, but supplies available for the spring planting were less than half of requirements. The principal obstacle to manufacture of farm machinery is shortage of steel. Thus agricultural and industrial recovery are interdependent. In line with the encouragement of agriculture the level-of-industry plan allows retention of approximately 70 per cent of pre-war capacity for manufacturing light tractors, and all existing capacity for other agricultural equipment subject to restrictions on the type of product. With respect to fertilizers, the plan envisages over 100 per cent of pre-war production of potash, but cuts nitrogen and phosphate capacity to 40 per cent of the 1936 capacity because these chemicals are important in the manufacture of munitions. For this reason two of the three chief fertilizers will have eventually to be supplied in large measure by imports. The plan allows retention of capacity for making nitrogen through the synthetic ammonia process until necessary imports of nitrogen can be secured and paid for.

(b) *Exports and Imports.* As explained earlier, it is through a system of exports and imports that the level-of-industry plan reconciles the requirements of industrial disarmament with those of German self-support at a specified standard of living. Besides food for the population her land cannot support and fertilizers to make her land support as many as possible, Germany must import much of the raw materials and the chemical and metal products required both for her permitted industries and for direct consumption. To pay for these she must export an equivalent value, estimated in the plan at three billion reichsmarks in terms of 1936 price levels.

Heavy industry formerly furnished a major share of German exports. As a result of reparation removals, the bulk of German exports in the future, other than coal, will come from light industries, which are relatively unaffected by reparation. This requires a corresponding change of markets. Before the war Germany had the greatest concentration of heavy industry on the continent. As reparation removals disperse

this capacity, other countries will receive and operate it, thus creating demand for a complementary supply of light industrial products. The discovery of markets in the meantime presents little difficulty in a world where war has created so many shortages. If circumstances, nevertheless, do prevent the satisfactory development of these markets, the level-of-industry plan will be open to revision because it explicitly assumes "that exports from Germany will be acceptable in the international markets."

The large-scale development of German imports and exports is waiting upon the formation of a central agency to plan and co-ordinate them for the whole of Germany. Eventually an exchange rate for the reichsmark should be agreed upon to facilitate payments.

At present the pattern of German foreign trade does not even remotely resemble that which is planned for 1949. German industrial production has not yet attained substantial levels—in the United States zone it was estimated at about one-third of post-reparation capacity at the end of March. Hence German exports at present consist almost entirely of Ruhr coal. Imports consisted predominantly of food up to the spring of 1946, but industrial raw materials will be required increasingly as reactivation gets under way. Among the first of these will be cotton for the textile mills. A small shipment of cotton has already been made and larger shipments are being planned.

(c) *A Rising Standard of Living.* The most important long-range problem for the German economy is hope. Allied policy offers Germans an opportunity to recreate their economy along peaceful lines. They have the requisite skill, industry, and enterprise to make use of that opportunity, but whether they actually do so depends finally on motives which only hope can sustain. For this reason the United States has held consistently to the view that the Potsdam Agreement does not permanently fix the German standard of living at the modest level adopted for determining reparation removals, and that whatever long-term limitations may be imposed at a later date should allow the Germans enough scope to work for a rising standard of living along with the rest of Europe.

Conclusion

The success of United States economic policy toward Germany both depends on and conditions the success of political and cultural policy. It depends on the success of these policies, because economic order and economic hope cannot thrive amid political or cultural decay. It conditions success in these fields, because they require a Germany that is able to live but not to rearm. Only if the German people meet their economic problems can they be expected eventually to "take their place among the free and democratic peoples of the world."

Similar relations hold between German and world economic policy. The very fact that economic disarmament will make Germany more dependent than ever upon foreign trade implies that Germany's problems can be solved only in the context of a stable and expanding system of international commerce.

As the first year of occupation drew to a close, United States economic policies toward Germany converged upon a decisive issue. The level-of-industry plan, the program of reparation removals, the continued reactivation of industry, the co-ordination of transport and communications, the restoration of interzonal and international trade, and the solution of major problems in taxation, currency, and foreign exchange—all depend upon whether Germany is to be treated as an economic unit. This question will largely decide whether the ground covered so far must be traversed again or whether the occupying powers can move steadily forward in the direction originally chosen.

Greece: A Plan From Abroad

Introduction

BY 1946, years of invasion, warfare, willful destruction by conquerors, and the ensuing inflation had reduced Greece to a broken-down economy. If Greece were to recover, foreign aid was imperative. First, the Food and Agriculture Organization of the United Nations (FAO), early in 1947, and then the American Economic Mission to Greece, headed by Paul Porter, analyzed the Greek situation, and suggested correctives. In later sections of this chapter are reproduced substantial parts of the FAO Report.¹

What did the economic doctors prescribe for Greece? For the immediate future, measures that would keep the patient alive. In view of the Greek repugnance to controls, the achievement of minimal supplies and adequate distribution could not be easy. Advisers urged strengthening of existing controls and introduction of new ones; and they pleaded with foreign governments for temporary aid which would yield supplementary food supplies and clothing and make possible a partial recovery of transportation.

In the longer view, assuming that the patient would continue to breathe, the prescription was bolder. First, it was necessary to industrialize: as a means of absorbing surplus population, of raising produc-

¹ For a summary and recommendations of the American Economic Mission to Greece (Paul Porter), see Dept. of State: *Bulletin Supplement, Aid to Greece and Turkey* (May 4, 1947), pp. 898-909. In it the reader will also find excellent statements by Messrs. Acheson, Clayton, and Porter on the Greek situation.

tivity, and of providing agriculture with mechanical aid. It was hoped that the percentage of population supported by agriculture might be reduced from 60 to 40 per cent. Population was excessive in relation to the land; and if industrialization did not provide productive work for the excess, emigration might be necessary. With improved agricultural methods, moreover, the excess would tend to grow.

Second, reform in agriculture was long overdue. Among the proposals made were increased use of machinery; modernization of methods; greater use of crops requiring intensive utilization; development of hydroelectric resources, irrigation, and flood control; and a healthy development of co-operatives.

Third, inflation was the termite destroying the economy. Drastic steps were required to destroy the inflation termite or bacillus: like these, inflation works stealthily and unseen; and like these, inflation brings disease, corrosion, and destruction. The experts would attack inflation through increased output and more economical distribution, and keep demand down through various controls. Less waste by government and improved terms of trade for farm products in relation to industrial products, which would stimulate agricultural output and sales, would probably moderate the pressure on prices.

Finally, recovery in export trade was a condition for a healthy economy. With the drachma overvalued—that is, the drachma too expensive for foreign buyers in the light of the more rapid rise in Greek prices relative to foreign prices, allowing for the increased cheapness of the drachma in terms of foreign currencies—it would help to reduce the external value of the drachma. But if that were done, exports and imports would rise in price and strengthen inflationary pressures. Loss of export markets in currants, olive oil, and tobacco, also, was a source of concern. Failure to make the most effective use of foreign exchange further impaired the country's foreign position.

In short, drastic measures had to be taken. But the country moves sluggishly and reacts violently against controls and innovation. Unless the radical changes proposed in the blueprints can be adopted, Greece's economic future is dim, indeed.

The Greek Mission's Report in Brief²

Immediate Problems

Greece has resources and people capable of sustaining much higher productive levels than those so far attained. In spite of the efforts of the farmers and workers, and the help received from UNRRA, the war devastation in Greece has been only partly repaired, and the country is still

² *Report of the FAO Mission for Greece* (March 1947), pp. vii-ix, 2-6, 11-13, 20-3, 55-8, 159-63. Opening remarks have been omitted.

far from being able to support its population. Vigorous efforts to deal with these immediate problems are essential before longer range development measures can be successful. Special attention is called to the current food shortage; to the need for outside aid to maintain essential imports after UNRRA withdraws; to the necessity of continuing school meals and other special feeding programs for certain groups of the population; to the urgent need for rehabilitation of the productive apparatus of the country, especially of transportation facilities, industry, and agriculture; and to positive measures to prevent further inflation and to restore export sales and shipments.

Water Utilization

The report recommends a broad development of water resources, including drainage, flood control, irrigation, and hydroelectric projects. In the first few years, construction work should be completed on those projects which were started before the war, existing works should be put in good order, and the most readily available new smaller projects should be undertaken. Preparation should be made for the development of large multipurpose projects involving detailed engineering plans. These should be undertaken as promptly as technical and financial arrangements can be completed. Completion of the full long-term program (which might require a decade or more) would make possible the irrigation of about one-fifth of all the cropland in Greece and the development of as much hydroelectric power as that produced by the Boulder Dam project in the United States of America. This would give Greece an area suitable for the production of fruits, vegetables, and other intensive irrigated crops, about one-third as large as the irrigated land in the farms of California (U.S.A.), and would provide resources for a great expansion and modernization not only in agriculture but in industry.

Measures to Improve Agriculture

In making recommendations for the long-range development of Greek agriculture, the Mission points out that Greece is peculiarly dependent upon world-wide prosperity to enable her to increase the export of Greek products. Means to increase both the volume and quality of farm output per family are stressed. At present, the average yield of grain crops is only about one-half to one-third of the average yield in most countries of Europe. Greatly enlarged opportunities for nonfarm employment are needed to reduce the rural population, because even with full development of irrigation and of intensive agriculture Greece could not profitably support her present proportion of farm people. It is emphasized that this proposed shift to more intensive agriculture and

larger farms, and from farming to other industries, should be brought about by gradual and voluntary action of the people, responding to improved opportunities made available to them, rather than by compulsory directives of the government. The long-term effects of greater industrialization on farm life would mean greatly improved standards of living for the farmers and workers alike.

Proposed technical measures to improve agriculture, forestry, and fisheries cover a wide range of activities. The Mission advocates a reorganized Ministry of Agriculture to strengthen agricultural education and to promote increased research, relating it to practical problems; and to strengthen and intensify the extension of advisory services to farmers. Recommendations on research outline a proposed reorganization of existing research facilities, and advocate the consolidation of research activities in two agricultural experiment stations. An intensive study must be made of such crop problems as seed production, cultivation practices, and the adaptability of labor-saving agricultural tools and machinery to conditions in Greece. Research in soils is greatly needed, and recommendations to supply needed fertilizers and develop soil conservation are included.

The Mission emphasizes that in view of the wide variations in types and kinds of soils in Greece, careful research should be conducted on the kind and varieties of plants that will thrive best in each kind of soil. For instance, in horticultural crops, certain kinds of trees, such as peaches, will not grow well on soils rich in calcium, while other soils, deficient in zinc or other minor elements, may be incapable of growing healthy orange or lemon trees.

Vigorous, extensive propaganda is urgently needed to convince growers that an effective preserving and canning industry can be built up only on the basis of the production of first quality products derived from varieties specially selected for the purpose. The improved varieties selected should be planted in large enough units to make their commercial utilization for processing and shipping possible. The present multiplicity of varieties, especially in fruit crops, makes proper care impossible, and volume of production at any one time is insufficient for effective commercial processing or sale.

Protection of the forest areas of Greece would prevent erosion and provide a source of valuable lumber as well as browsing for livestock. The Mission believes that a special Forestry Research Institute should be established and research in all phases of forestry strengthened.

Research in livestock husbandry should be directed toward raising the low level of productivity of the livestock industry, by determining breeding, feeding, and management methods suitable to agricultural conditions in the country. These objectives could best be attained by establishing a new Animal Husbandry Institute at a main experiment station.

Improved methods of production and better quality of livestock products for food or as raw material are stressed. Suggestions are also made for research in veterinary medicine.

The Mission points out that Greece must have an adequate number of college trained workers, if the results of research are to be put into practice. Recommendations are made for the recognition of a faculty of agriculture by the universities, college education in home economics, and the placing of administrative responsibility for all college education under the Ministry of Education.

The inadequacy of guidance received by the farmer from government agencies is the subject of several recommendations to strengthen and improve the extension (advisory) services. Dissemination of information through demonstrations, the press, radio talks, and motion pictures are advised wherever suitable. Attention is drawn to needed improvements in crop husbandry, the value of fertilizer demonstrations, and the desirability of introducing improved varieties of agricultural and horticultural crops. The Mission discusses the need for further study of artificial insemination as a means of livestock improvement before it is incorporated into the livestock program, and recommends the provision of free veterinary service as an essential part of the extension services. The Mission emphasizes that methods and equipment traditionally used by Greek farmers should be improved and modernized.

The section on administrative and action programs recommends that the Ministry of Agriculture should assume responsibility for their supervision. Appropriate measures to control plant pests and animal diseases, and a system for the local control of grazing are proposed. While the Mission was not equipped to give specialized guidance on forestry problems, it makes general recommendations on immediate projects in reforestation and the adoption of a long-range program. In addition to the general technical recommendations, the Mission notes several specific production policies desirable for particular crops or products, including raisins, currants, and wine.

Fisheries

Among the fisheries recommendations, the Mission advises placing the entire administrative responsibility for fisheries in the Ministry of Merchant Marine. Greece has need of a strong research and education program in fisheries, and the Mission makes several recommendations along this line, and for provision of improved facilities for marketing fish. Co-operatives of fishermen are in need of funds, and the Mission emphasizes the advantages to Greece of increasing support of such co-operatives. Finally, a comprehensive review and modernization of legislation on the regulation of fisheries is necessary if Greece is to encourage the development of the industry.

Economic Measures

The Mission also proposes that the Greek government provide increased technical and financial facilities for the co-operative movement. These would enable co-operatives to participate to a larger extent in farm and village improvements, in operating tractors, threshers, and other community equipment, in marketing and processing farm products, in establishing local industries, and in buying and distributing supplies.

The report recommends that the work of the Agricultural Bank of Greece be correspondingly expanded and strengthened to assist co-operatives. While the Mission recommends measures for making co-operatives democratic and independent and placing them on a par with private industry, it opposes compulsory co-operatives or the use of co-operatives for public price support or commodity control measures.

The study of methods to consolidate the strip system of cultivation is proposed, as a means of reducing labor waste and inefficiency in use of tools or machines.

Since agriculture cannot be greatly improved without concurrent developments in the economy as a whole, the Mission also advocates general measures by the Greek government to improve education, expand industry, and develop opportunities for emigration to other countries. The main emphasis in dealing with the problems of the unemployed population and present inadequate resources of the country, is placed on intensification and modernization of agriculture, expansion of hydro-electric development, and extensive industrial development. This would make possible the employment of many more people in industry with a much smaller proportion remaining in agriculture than at present, a great expansion in trade between Greece and other countries, and the attainment of levels of production and incomes double or triple those of pre-war years. The Mission also recommends reforms in the tax system to help provide needed buying power, and points out that reforms in civil service are essential to create and maintain a body of public leaders, administrators, technicians, and educators capable of carrying through a program such as that recommended.

The Mission is aware that the Greek government could not put all its recommendations into effect immediately. The problem of training the necessary professional and technical men and women is in itself a goal toward which Greece should aim over a number of years of development. The essential immediate measures outlined in the first section can be started at once, and subsequently as the available financial and other resources of the country increase, more and more of the objectives can be attacked.

International Action

To support the measures to be taken by the Greek Government, the Mission recommends action by FAO and other international agencies. In particular, it is recommended that a United Nations Advisory Mission for Greece be established, representing the Economic and Social Council, FAO, the International Bank for Reconstruction and Development, the International Monetary Fund, and other co-operating specialized international organizations, to give technical aid and advice to the government in carrying through the proposed program and expending the external loans involved.

In addition to funds which may be obtained from reparation payments and special international loans for food and other immediate essential imports for consumption, the Mission recommends international loans for Greece to carry through the development program, starting with an initial commitment of 100 million dollars for 1947-48. This loan would be available for the importation of materials, equipment, supplies, and services needed for rehabilitation and development of transportation and communications, of water and hydroelectric projects, of farms and marketing, and of private industries, in accordance with the program recommended to develop and modernize Greek agriculture and industry. The Mission further recommends that subsequent loans be considered to carry the program forward as rapidly as the initial funds are put to use.

In its letter of transmittal, the Mission states that "if the Greek people can achieve national unity in attacking their problems, then the adoption of the measures outlined in our report will assist them to rehabilitate their national life and attain a standard of living more consistent with modern ideals." . . .

Possibilities for Development ³

(8) The conditions and possibilities of Greek agriculture cannot be separated from related problems of Greek economic life as a whole, and this must be taken into account in drawing up programs for future agricultural reconstruction and development. The Mission has, therefore, felt compelled to make recommendations somewhat outside the scope of agriculture alone, and even of industries related to agriculture.⁴ It has

³ Paragraphs 1-7 deal with the organization and work of the FAO Mission.

⁴ In general, the term "agriculture" is used in this report in the same wide sense as defined in the FAO Constitution, to include fisheries, marine products, forestry and primary forestry products. At times, however, as when referring to "Measures to Improve Technical Agriculture," it is used in a more specific sense.

examined, at least in outline, the most acute problems of the general economic and administrative structure of Greece, and has made several broad recommendations for policies to be followed in dealing with them. These general recommendations are offered subject to development or modification in the light of more detailed subsequent study.

(9) Greece has resources and people capable of sustaining far higher productive levels than those so far attained. The country can very materially increase its per capita production and national income, probably to double or triple its present level within two or three decades. This can be done by effective development and use of water potentialities for irrigation and hydroelectricity, by the education of its citizens in modern technologies, by the development and use of improved agricultural methods, and by the expansion of industry to use unemployed labor effectively. Capital used for these purposes in Greece will have a productivity far greater than similar sums would have in better developed countries. The Mission is convinced that if the Greek government will co-operate wholeheartedly with international technical aid, as proposed in this report, the country will be able to repay the principal and interest on necessary domestic or foreign investments, over a term of years. The Mission has also proposed a means of continued consultation and first-hand advice, through which the specialized international organizations, as technical advisers and investors in the program, can co-operate with the Greek government in effecting a broad program of development.

Recommendation 1: Principal Goals and General Program

The Mission recommends that the Greek government

- (a) act vigorously to deal with immediate or transitional problems which block progress toward any long-range goal;
- (b) adopt as its long-range goal the transformation of Greece from a predominantly agricultural country employing mostly primitive methods to a more industrialized country employing efficient modern methods in agriculture and in industry;
- (c) start a program of modernizing its own agricultural and other services to provide the facts, guidance, education, and public facilities necessary for its people to carry this program into action;
- (d) give special attention to the improvement of agricultural methods, better utilization of water and soil resources, the encouragement of co-operative action by farmers and consumers, and the development of greater industrial activity and employment;
- (e) request the appropriate United Nations agencies to furnish the technical and financial assistance needed to help Greece meet immediate transitional problems and to start toward these long-range objectives.

(10) On the agricultural side, this program would provide for the expansion of agricultural areas through flood control, drainage, and irrigation, with related hydroelectric developments, reforestation, and controlled grazing; the intensification of production through a gradual and partial shift in suitable areas from extensive to intensive crops, including fruits, vegetables, and expansion in livestock and livestock products, and improvement in the quality of agricultural products for domestic consumption and for export; reduction of labor requirements and of the number of workers in agriculture in nonintensive areas through gradual extension of modern machinery and modern cultural methods; a great increase in output per acre and per man through improvement in the variety of seeds and the quality of livestock; improved cultural practices, improved and more extensive use of fertilizers, and general modernization of agricultural practices; and great improvements in the fisheries output, from the use of better gear, control of fishing in the interest of maximum production and better marketing. Appropriate research, extension, and educational facilities to help bring about these changes, and financial aid through the Agricultural Bank and the public works agencies of Greece, are recommended elsewhere. The great increase in commercial agriculture and in exports would in turn pay for increased imports of equipment, tools, grains, metals, and other goods and services needed by Greece to help raise standards of both production and consumption.

(11) Despite the increase in agricultural land and output which can result from the activities suggested, Greece has many more people on the land than can be used there effectively. To provide work for the under-employed rural population and buying power for the increased production of farm products, a broad program of industrial expansion is recommended, to include great development in agricultural processing facilities of all types, largely under co-operative sponsorship; related industrial processing at the next stages such as textile spinning and weaving, clothing manufacture, shoe and harness manufacture, refining of olive oil and extracting of essential oils for export; the development of other industries suited to the country in international competition with production elsewhere, such as fabrication of simple metal products and tools, paper manufacture, printing, building materials, and probably synthetic nitrogen and other chemical industries; expansion in trades, services and professions, transportation, shipping and the merchant marine, wholesale and retail trade, service industries, hotels, restaurants, amusements, and recreational industries; and a great expansion in tourist industries, including tourist hotels and other facilities.

(12) This combined program of agricultural and industrial development, and of financial aid for that purpose, is recommended as a

long-range objective over the next 25 years. Detailed suggestions and recommendations follow for action by the Greek government and by FAO and other international organizations to implement this general program.

(13) *Statement of principles.* The proposals of the Mission are based upon certain basic principles of effective economic and cultural development, which are set forth in Appendix H.⁵ These principles may be summarized briefly as follows.

(14) The development of the resources of any agricultural country should be undertaken with the main objective of raising the standard of living and providing a healthful diet among the masses of the population. In order to do this, agricultural activity must be directed primarily towards the increase of production per person. The economic phases of this development must be accompanied by corresponding developments in the cultural life of the community. This will avoid the danger of deviating from the main objective, that is, the welfare of the farmer, his community, and the nation as a whole.

(15) An improved standard of living can be obtained successfully only through the education of the individual so that he learns to rely on himself. Guidance and training inspired by and based upon modern scientific research can result in spontaneous initiative and action by individuals and communities, whereas reliance solely on a series of directives and regulations from above would result only in an unwieldy bureaucracy. Securing the proper balance between governmental leadership and local freedom for initiative and action can be helped by emphasizing delegation of authority and decentralization of responsibility in government activities, especially where technical and scientific tasks are concerned.

Immediate and Transitional Problems

(16) Before Greece can start working toward these long-range goals, serious present difficulties must be faced. Many of these can be dealt with by vigorous action of the government and people, using resources already in the country or funds readily available.

Recommendation 2: The Immediate Food Shortage

The Mission recommends that the Greek government continue at least through the 1947 crop year an agricultural program with maximum emphasis on food production for direct human consumption, and continue bread rationing and other control measures to secure the most effective use of domestic and imported foods. . . .

⁵ Omitted here.

(17) In planning farm programs for the 1947 crop year, at least, the current world food shortage must be kept in mind. Immediate steps to deal with this shortage were discussed at FAO's Special Meeting on Urgent Food Problems at Washington in May 1946. This meeting recommended that countries keep in force all war measures designed to increase food output, especially of bread grains, potatoes, and milk; regulate or ration the use of food so as to restrict consumption to the minimum and to ensure equality in consumption; use no bread grains for livestock, and reduce as far as possible in 1947 the feeding of coarse grains, corn, barley, and oats to livestock, especially to meat animals. Where existing control measures are not adequate for these purposes, the meeting recommended that nations strengthen or broaden them.

(18) The long-range objective in Greece involve an eventual shift toward increased production of fruits, vegetables, livestock and livestock products, and other protective foods, for commercial sale and farm consumption, with less emphasis than in the pre-war period on cereal production in areas and regions not well fitted to efficient production of these crops. Measures designed to encourage agricultural shifts in these directions should not be inaugurated until the current world food crisis has eased, and until food and feed supplies are available again for import at reasonable prices. Farmers should be urged not to increase their flocks and herds of grain-consuming animals, at least until more nearly adequate world supplies of cheap grain are available. In addition, efforts should be made to see that the fertilizer, manure, and water available in 1947 are used primarily for food production and that their application on tobacco, cotton, melons, and other nonfood or luxury crops is discouraged.

Recommendation 3: Maintaining Essential Imports after UNRRA Ends

It is recommended that the Greek government request the Economic and Social Council, and the governments of the United States of America and the United Kingdom, to aid it in securing funds for the continuation of essential food and other imports to cover the period after UNRRA's withdrawal, until expanding exports, international development loans, and expanding production enable Greece to balance its international accounts without special aid.

(19) Present prospects are that UNRRA food shipments to Greece will end during 1947. The Mission hopes that international loans to Greece for reconstruction and development, as recommended later, may be made by that time, and that a portion of these loans during the first year or two can be used to pay for imported food and clothing for Greek workers on reconstruction and new capital projects, as well as for im-

ported equipment.⁶ If these and other international loans are not available promptly and in sufficient volume, Greece will either have to draw so heavily for imports of essential foodstuffs and supplies, on her limited foreign exchange assets as to imperil her international financial position, or else let her people, and especially her children, again go hungry or starve. In view of the 400 million dollars already invested by the Allies and the United Nations in the relief of Greece, and the progress already under way in Greek agriculture and industry, the Mission believes it would be very unfortunate to let this progress come to a standstill after UNRRA withdraws.

(20) Means to continue aid for reconstruction and development in Greece without any gap may be found in part by securing international development loans as recommended subsequently, and in part by securing loans or grants for temporary relief purposes, either from international organizations or from individual countries. . . .⁷

Recommendation 6: Rehabilitation

The Mission recommends that the Greek government

- (a) give special emphasis to speeding the rehabilitation of the country's most essential productive equipment, especially transportation and communication facilities, repairs to industrial plants, and repairs to drainage and flood-control works;
- (b) adopt a temporary program of citizen labor on the roads, participated in by all able-bodied males, from country and city and also from the armed services, to put roads back promptly into passable shape;
- (c) use portions of existing funds, especially from the unspent remainder of the 25 million dollar Export-Import Bank loan, to purchase at once essential equipment and engineering and other technical services to hasten rehabilitation;
- (d) push vigorously the purchase of war surplus equipment, especially automotive equipment, and small and large ships, using promptly the credits already granted for these purchases; and

⁶ The Mission is not competent to make an independent estimate of the prospective deficit in the Greek balance of payments. In the reports of Subcommittee III of the Temporary Subcommission on Economic Reconstruction of Devastated Areas of the Economic and Employment Commission of the United Nations Economic and Social Council, the prospective deficit in the Greek balance of payments for 1947 was estimated at 72 to 136 million U.S. dollars excluding imports for capital reconstruction and expansion. Other estimates of the prospective deficit run considerably lower. Import needs of grain have been estimated at 360,000 to 600,000 metric tons, which would cost about 30 to 45 million dollars at present prices. The remaining stocks or UNRRA goods available for distribution after January 1 may reduce these total requirements.

⁷ Recommendations 4 and 5 deal with feeding programs and return of facilities to civilian use.

- (e) in housing reconstruction, hasten the building of temporary shelters, especially for the bombed villages, until permanent needs for shelter are clearer, and until larger resources are available to rebuild permanent housing. . . .⁸

Recommendation 8: Inflation Control

The Mission recommends that the Greek government act to prevent further inflation by taking the following steps:

- (a) Consider the advisability of extending the use of rationing and price controls for scarce basic goods for a transitional period.
- (b) Adopt measures to speed and expand industrial production from existing plants, and to move the products to consumers without excessive merchandising mark-ups.
- (c) Speed the import of goods by advancing foreign exchange, within the limits of that available, to co-operatives and co-operative unions to buy products abroad and to distribute them to their farmer and consumer members at cost, aiding this program by
 - (i) providing funds for purchase of consumer goods, such as clothing, textiles, shoes, and foods where available, and simple producers' goods, such as tools, pumps, fertilizer, repair parts, etc., and
 - (ii) setting up permanent joint buying and selling offices of the Agricultural Bank and the Confederation of Co-operatives at major world merchandise centers, to aid co-operatives to place orders for goods abroad.
- (d) Undertake at once to negotiate commercial or exchange arrangements for the exchange of goods with countries which still have controlled foreign trade, pending the general resumption of freer foreign trade.
- (e) Provide increased public support to expand co-operative collection, processing, and sale of farm products, giving co-operative organizations equal facilities with those provided private enterprises.
- (f) Reduce expenditures for military purposes as rapidly as increasing international confidence and increased reliance on the United Nations make possible.

(50) The threat of more inflation, and the present very high prices of industrial products compared with those of goods that farmers sell hamper recovery in Greece and limit the production and export of tobacco, raisins and currants, olive oil, and other products. Effective efforts to control inflation are essential to establish stable conditions and to start on long-range programs.

⁸ Paragraphs 24-46 discuss in detail the damage done to railroads, transportation generally, housing, livestock, and industrial equipment, and the manner of rehabilitation. Recommendation 7 and paragraphs 47-49 relate to the problem of village rehabilitation.

(51) The effect of the shortage in industrial goods, and of the general inflationary situation, on the purchasing power of farmers can be seen from the prices for various products given in the following table. On the average, the prices of industrial products which farmers buy have advanced two to three times as much over pre-war prices as have prices which farmers receive from their products. These price relations indicate the critical need of checking inflation, increasing supplies of industrial products, and reducing their prices to correspond to those of farm products, if agriculture and agricultural exports of Greece are to prosper again.

Recommendation 9: Restoration of Export Markets

The Mission recommends that the Greek Government aid the restoration of export markets of tobacco, currants, and other products by

- (a) seeking to reduce internal prices by pushing vigorously the measures already recommended under Inflation Control;
- (b) reducing or removing production, sale, movement, or export taxes on export commodities;
- (c) managing the internal distribution of UNRRA supplies and other governmentally controlled products so as to provide adequate supplies of industrial goods and production equipment to farmers producing export crops, especially at the time they are receiving funds from the sale of their crops;
- (d) providing special technical and financial assistance to farmers, farm co-operatives, and private exporters to restore and improve the quality of export products and their processing and packaging for export requirements; and
- (e) opening negotiations with the major United Nations purchasers of Greek products, to secure special consideration for those exports, outlined in Recommendation 10.

(52) Greece used to sell the bulk of her exports to Central and Eastern Europe, particularly Germany, and therefore faces great difficulties in re-establishing export movement. This difficulty is increased by the internal price disparities already mentioned. In addition, many Greek exports are regarded by the importing countries as deferrable luxuries rather than essentials. Prompt restoration of export sales is necessary for Greece to be able to stand on her own feet again.

(53) In several of her major products, notably tobacco, currants, raisins, and citrons, exports from other countries expanded during or since the war. Greece's prior customers were forced during the war to do without the Greek products, and the methods of manufacturing cigarettes in the United States were shifted to require relatively less de-

PRICES RECEIVED AND PAID BY FARMERS, IN VARIOUS REGIONS⁹

Item	Average Prices		Multiple of Prewar
	Prewar ¹⁰	May-July 1946 ¹⁰	
	Drachmas per oke	Drachmas per oke	
Wool (unwashed), Crete	37	4,500	122
Oranges, Peloponnesus	4.5	475	106
Early potatoes, Crete	5	450	90
Wheat, Peloponnesus	10	1,300	130
Cheese, Peloponnesus	60	1,100	183 ¹² a
Cotton, Peloponnesus	24	1,500	65
Average ¹¹			110
<i>Export farm products</i>			
Tobacco, Macedonia	95	7,500	79
Currants, Peloponnesus	8.5	1,200	141
Olive oil, Peloponnesus	38	5,800	153
Olive oil, Crete	30	4,430	148
Sultanina raisins, Crete	16.5	1,050	64
Average ¹¹			110
<i>Industrial products bought by farmers</i>			
	Drachmas per unit	Drachmas per unit	Drachmas per unit
Men's undershirts, Peloponnesus	10	300	300
Cabot cloth, Crete, per pic ¹²	10.7	3,750	351
Cabot cloth, Peloponnesus, per pic	17	4,517	266
Cotton drill, Peloponnesus, per pic	53	12,300	232
Cotton thread, Crete, per oke ¹²	120	30,088	251
Nails, Crete, per oke	14.5	6,000	414
Chicken wire, Crete, per meter	22.5	4,000	178
Farmers' boots, Peloponnesus	203	72,000	355
Rope, Peloponnesus	36	16,000	444
Cart wheel, Peloponnesus	1,400	450,000	322
Farm cart, 4-wheel	7,000	2,800,000	400
Average ¹¹			309

pendence on the Oriental types.¹³ Special attention is given to the problems of tobacco sale and marketing organization subsequently. The

⁹ Data collected by the Mission from farmers, co-operatives, and dealers, May to July, 1946.

¹⁰ The prewar value of the drachma is calculated at 120 to the dollar; the post-war, 5,000.

¹¹ Geometric average of relatives, unweighted.

¹² A pic is .62 meters; an oke is 2.82 lbs.

¹³ 183 is obviously wrong. The correct figure is 18.3—Author.

¹⁴ Certain types of aromatic tobacco originally grown in Turkey, and now grown generally in Turkey, Greece, Bulgaria, and other eastern Mediterranean countries, are known as Turkish Oriental type tobacco. In order to distinguish this tobacco from Oriental type tobacco actually grown in Turkey, this tobacco is called Oriental tobacco throughout this report.

discussion here will be limited to problems which are common to all Greek export products.

(54) As already shown (table above) prices of export farm products have been lower than those of domestic farm products, and much lower than prices of industrial products farmers buy. In consequence, farmers are reluctant to sell their products. They hold back storable products such as tobacco and currants, hoping for better prices. In some cases (such as cotton or, in some areas, high quality tobacco), farmers have reduced acreage of export crops because of inability to make a living under present price conditions.

(55) At the same time, the general price level in Greece has advanced far more than exchange rates have declined. Whereas the exchange rate against dollars has gone up from 120 drachmas to 5,000, or 41.7 times, the general price level in Greece has increased about 145 times. When prices in Greece are compared with those in the United Kingdom and the United States, converted to dollar equivalents, they appear as shown in the following table.

WHOLESALE PRICES			
All Commodities in Greece, United States of America, and United Kingdom—Pre-war and 1946 (Converted to Dollars) ¹⁴			
<i>Year</i>	<i>United States</i>	<i>United Kingdom</i>	<i>Greece</i>
1939	100	100	100
1946 (July)	161	157	348

(56) While this extremely high price level in Greece is due in part to war-caused shortage of goods and increases in transportation costs, it is nevertheless one of the difficulties which blocks full resumption of export sales, by making prices for tobacco, currants, or figs that seem ridiculously low to Greek farmers (in drachmas) seem prohibitively high to foreign buyers in the United States, the United Kingdom, and other countries.

(57) Other difficulties that impeded the free flow of exports in 1945 and 1946 were the poorer quality of many Greek products owing to war-time destruction of facilities, shortages of containers, loss of skill, and wartime lowering of standards of sorting and packing. The internal taxes in Greece, such as the tobacco sales tax of 20 per cent, and import and export municipal taxes or port charges on other products, widen the price gap between farmer and foreign purchaser. Difficulties in financing the movement and processing of the crop between farmer and exporter (as in tobacco) result in the supplies not being in position or

¹⁴ Price indexes in each country's own currency (1939 = 100): U.S.A., 161; U.K., 172; Greece, 14,500.

condition for exporters to buy. Shortage of internal transport facilities and of ocean shipping make it difficult to move products. All of these supplementary difficulties, if recognised clearly and attacked effectively, can be overcome in time. The immediate and most fundamental problem, however, is that of price disparities.

(58) It is suggested that the price disparities can be corrected by action along two lines. First, increase commodity supplies in Greece by speeding the purchase abroad and sale in Greece of foreign goods and expanding production in existing Greek industry, by the methods already recommended, and reduce prices of industrial products relative to farm products. Second, after the free flow of foreign goods into Greece has been re-established, set the permanent exchange value of the drachma at a level that will help bring internal prices in Greece into proper balance with world price levels, both for export and import goods. The adjustment, if any, should of course be made in consultation with the International Monetary Fund.

(59) Correction of the existing disparities between prices of exportable farm products in Greece and price levels abroad, and between prices of those farm products and prices of industrial products in Greece, are key steps in the restoration of Greek export trade. Until effective steps are taken to correct these disparities, normal exports and imports will be impossible.

Recommendation 10: Special Consideration by Allies for Greek Exports

It is recommended that

- (a) the Greek government request the major allies of Greece in the last war to give special consideration to the need of Greece for the re-establishment of her exports, and give Greece special consideration, especially as compared with nations which were neutrals or enemies in the war, in devising their programs and placing orders for imports for 1947; and
- (b) the occupation authorities for Germany and Austria give special examination to the import of Greek products, and at the earliest date possible permit at least a partial resumption of trade or exchange between Greece and those countries, especially with regard to tobacco exports.

(60) Greece can export not only tobacco, currants, raisins, citrons, figs, olive oil, and wine, and other dry or preserved products, but also nuts, grapes, melons and other fresh fruits. For example, fresh grapes from Crete could help satisfy the craving for fruits of western European countries where fresh grapes are selling at from three to twenty times as much as in Cretan markets....¹⁵

¹⁵ Paragraphs 61-83 and Recommendations 11-14 deal with utilization of water.

Long-Range Objectives for Agricultural Development

(84) Recommendation 1 and paragraphs 10 to 15 sketched in broad outline the general goals and programs recommended for the development of Greece. This section considers some of the basic policies desirable in that long-range development.

Recommendation 15: Greece's Place in an Expanding World Economy

The Mission recommends that the long-range programs for the agricultural development of Greece should be based upon the assumption that there will be an expanding world economy, including an increasing interchange of Greek products with the rest of the world.

(85) Because of limited natural resources, heavy population, and past economic development, Greece is far more dependent upon general world-wide prosperity than are most nations. Not only is one-quarter of all her consumable goods derived from imports, but also three-quarters of her exports are of a luxury type. The Greek economy is subject to violent derangement if economic crises or wars reduce the purchasing power of her customers abroad. Past autarchic efforts to make the Greek economy more self-subsisting, both in the 1930's and during the war, resulted only in reducing the country's overall productivity and increasing its poverty. Co-operation with other countries in expanding international trade, and emphasis on products best suited for production in Greece, can materially improve the output of the country. The Mission has assumed that the United Nations will press forward vigorously with international and national efforts to establish a secure, prosperous, and expanding world economy. Only on the assumption that such efforts will succeed can Greece carry through rational or far-sighted long-term plans.

Recommendation 16: Larger Output per Farm Family

The Mission recommends that long-range programs stress means to increase the volume and value of farm output per family, by

- (a) raising the acreage of land cultivated per family;
- (b) bringing more land under irrigation;
- (c) increasing the production of intensive crops, especially on irrigated lands;
- (d) improving crop and livestock output through better practices as recommended elsewhere in this report; and
- (e) extending the use of machinery and increasing the size of farms, especially in general-crop farming in dry-land regions.

(86) Farmers in Greece are poor because they have little land per family compared with most other countries, and because they generally

produce relatively little per acre on the land they have. On the average, the cropland per person on farms is only 1.31 acres in Greece—about the same as in India—as compared with 2.45 acres in Rumania, over 3 acres in France and Germany, and 4.6 to 6 acres in the United Kingdom, Sweden, and Denmark. At the same time, the average yield in Greece of grain crops—13.5 bushels per acre—is only one-half to one-third of the average yield in most countries of Europe, and is little higher than the average yield in India. Increase of agricultural productivity in Greece must therefore look toward both increasing the land available, and raising the output per acre.

(87) Better control of water, including irrigation, drainage, and flood control, can increase cultivated land acreage, and materially improve the productive capacity of the land. This will make possible the further development of intensive agriculture, yielding products for export as well as for expanded domestic consumption. Irrigated land not needed for intensive cash crops may be used for an intensive livestock industry based upon irrigated hay. These developments will require the fullest utilization of improved agricultural production practices, as recommended elsewhere.

(88) The low productivity of Greek agriculture is directly responsible for the chronic low nutrition of the Greek population. Before the war, the people of Greece were chronically underfed. Not only was total energy and protein seriously short of needs for good health and growth, but the quality of the diet was inferior in several respects. Most of the nutrients came from vegetable sources, and consumption of dairy products, meats, and other foods high in protein and in several essential vitamins was far below that in most European countries. Only a high consumption of fresh fruits and vegetables, much higher than in most European countries, served to help balance the diet, especially in these scarce nutritive factors. Increased agricultural production in Greece, provision of more land per farm family so that greater areas will be available for the production of livestock and livestock products after the basic food needs of the farm family are met, and increased foreign exchange to import more bread grains and livestock feedstuffs, are all basic to improving the quality of the average diet in Greece.

(89) Even with the fullest possible development of irrigation and of intensive agriculture, however, the agriculture of Greece cannot provide profitable employment for all the people now living on the land. In dry-farming regions such as the Thessalian and Macedonian plains or the Mesara Valley of Crete, introduction of modern machinery and consolidation of existing small holdings into fewer but much larger farms, along with better production methods, would make it possible to raise output and income per family so satisfactory levels, but would involve a great reduction in the number of families which could be

supported from farming in those regions. Even dry-land production of grapes and olives could be made more efficient and profitable by the introduction of suitable equipment and machinery, improved practices, and a shift to larger acreages per family. In mountain districts, where a large population is now dependent upon a small and depleted grazing and forestry area and very limited cropland, even larger reductions in rural population would be needed if the remaining people were to make a decent living on the land.

Recommendation 17: Enlarged Opportunities for Nonfarm Employment

The Mission recommends

- (a) that the agricultural programs be based upon the assumption that opportunities will be offered in nonfarm occupations for an increasing proportion of the population; and
- (b) that the Greek government encourage, through all the short-term and long-term measures at its command, and through such co-operation as it can obtain from international agencies, the fullest and most rapid development possible in industrial, commercial, recreational, tourist, and other nonfarm occupations and employment.

(90) Even on an optimistic estimate of the fastest possible progress in irrigation and in farm production practices, Greek agricultural resources will still be insufficient to provide useful work or satisfactory standards of living for a considerable proportion of the people now dependent on agriculture. In addition, there are many unemployed or only partially employed people in the cities and towns. As agriculture develops and more improved and labor-saving machinery is introduced, opportunity must be provided for many of the families or workers to shift from farming to nonfarm industries as their main basis of support. Over a considerable term of years, the proportion of the workers in Greece dependent upon agriculture might be reduced from the present level of about 60 per cent to 40 per cent or even lower.

(91) Greece has large opportunities for greater industrial development, and for a resulting gradual increase in the proportion of her workers engaged in industry and other nonfarm work. It was not the task of this Mission to investigate such industrial opportunities in detail, or to explore measures for stimulating their more rapid development. In view of the urgency of rapid expansion of opportunities for nonfarm employment in Greece, however, comments on possibilities in this field have been included in paragraphs 46 to 58 of Appendix I, and certain suggestions for general action helpful towards both agricultural and industrial development have been included in the Mission's specific recommendations.

Recommendation 18: Gradual and Voluntary Shifts

The Mission recommends that the shifts proposed in this section—to more intensive agriculture, to larger farms, and from farming to other industries—be brought about by voluntary action of the individuals concerned, with public agencies helping to provide opportunities and instruction for the new lines of work, but leaving individuals and families free to decide their own course of action for themselves.

(92) Readjustments between agriculture and industry should be both gradual and voluntary. The long-term proposal of a great expansion in industry and a material reduction of numbers in agriculture does not imply arbitrary transfer of populations from farm to city, or compulsion by the government on any individual worker or family to make the shift. On the contrary, stimulation and aid to expanded and new industries in villages, towns, and cities can create employment opportunities which in turn will attract workers from the farms. As non-farm opportunities increase, more and more families will find they can better themselves by giving up farming and turning to industry. In other cases, some members of the family will shift, leaving more land available for those who continue to farm. As some families give up farming entirely, the land they leave can be rented or bought by their neighbors, giving them larger acreages and better incomes. Loans for new wells, pumps, machinery, livestock, and better seeds and fertilizer, and expansion of irrigation and flood-control projects will enable those who remain on farms to improve their methods, increase their irrigated areas, and produce more per acre and per family. In addition to loans and public works for water and power, public agencies can assist these shifts by providing technical information on improved agricultural and industrial methods, practices, and opportunities, both in agriculture and in industry. Public agencies also can provide vocational education, both agricultural and industrial, to aid the coming generation to take advantage of the new opportunities, and can provide corresponding adult education through night courses or special training schools to enable older people to improve their status.

(93) In these ways, the great shift toward more industry and better agriculture can be carried out on a fully voluntary basis, each worker and growing youth being left to judge for himself what it will pay him best to do, yet being provided opportunities, training, and information which will help him choose wisely. The people of Greece are by nature individualistic and impatient of rigid controls. They are shrewd and ambitious, with a strong urge to better themselves. Many have a great desire for education, and willingly suffer severe privations to give their children a better start than they had themselves. Yet the Greek people are tenacious of their ways, and have maintained their own ancient

language and culture through centuries of rule by foreigners. Democratic and voluntary methods of future development, rather than compulsory dictation or direction, are in keeping with these centuries-old characteristics of the Hellenic temperament.

Long-Range Effects of Industrialization of Farm Life

(94) If the long-range program for the improvement of agriculture and the expansion of industry is vigorously carried through, great changes will be possible in conditions in farming villages and in the life of farm people. Rural electrification can gradually be extended, leading to greater use of electrical equipment, pumps, and supplies. As farmers gain in prosperity and depend more on machinery and internal combustion and electric motors, and less on human labor, their children will be able to continue longer in school, and schools can be improved. Water can be piped into village homes. More farm families can afford to have their bread baked in a community or village bakery, their clothes washed by machines in a village laundry, their fuel supplied by lignite, oil, or electricity instead of burning manure, their cloth and clothing bought factory-made instead of home spun, their cheese made in a co-operative factory instead of at home. The hours spent on the long trip out to the fields can be saved by most workers (except the herders needed to drive out the livestock and draft animals) using a community truck or bus.

(95) The labor required for plowing, cultivating, spraying, harvesting, and threshing can be reduced greatly by the use of community tractors and other machines. In these and other ways, the time of men can be saved for handling more land, while the farm women can be freed from the present back-breaking and endless jobs of field work, hoeing or harvesting, water-hauling, washing, baking, spinning and weaving, and walking hours each day to the fields and back. Mothers will have time to feed their families better and to give their children better care. Farmers and their wives will have time and energy to take advantage of adult evening classes to complete their primary education, to improve their technical and general cultural knowledge, and to participate actively in co-operatives and other community organizations—and even have time and resources for occasional trips to the city or excursions or vacation trips to the mountains and the sea. Farmers will be able to enjoy life as consumers and as citizens, to participate in the good things of life as well as laboring as producers to turn out the basic raw materials.

(96) Achieving these attractive goals will not be easy. Many traditional ways of doing things in the villages will need to be changed. Many people will have to study and work hard, and take chances in risking their savings or in changing their careers to make these good things

come true. Multitudinous hardships and difficulties must be faced; many problems must be solved. With far-sighted national leadership, vigorous international help, and a long period of growth and development, all this can be attained. . . .¹⁶

Measures for General Economic and Industrial Development

(267) The long-range program discussed in the previous pages means pushing vigorously on two policies Greece has followed heretofore: a policy of industrialization, which was dominant in the latter part of the nineteenth century, and a policy of improvement and expansion of agriculture, which has been dominant in the twentieth. Effective carrying out of both these policies can transform Greece, within the next generation, from an overpopulated country with 60 per cent of its workers on farms and with a very low per caput income, to one with less than 40 per cent of the workers on farms, far higher output and standards of living for both farmers and city people, and a real national income at least two to three times its present size.

(268) To achieve these results would require a great expansion of commercial agriculture and of industries producing products for export and for home consumption; great increases in foreign trade, both imports and exports, especially with countries of Europe that can use the products of intensive Greek agriculture; and a shift away from the production of products, such as cereals, which are ill adapted to many sections of Greece and which can be obtained more cheaply from abroad. Both farms and industries would need modern practices and modern machinery, adapted to conditions in Greece, to increase the output per hour of labor. In addition, a small part of the present pressure of the unemployed population might be relieved by expanding opportunities, for those who wish to move, for emigration to other countries with undeveloped resources or manpower shortages.

(269) For such a program to succeed, it will be necessary not only to develop water and power resources and improve the technical and educational services to agriculture, as already recommended, but also to modernize the institutions of government and economic life. The following recommendations are made with these ends in view.

Recommendation 79: Improvement of Education

It is recommended that the Greek Government act vigorously to improve general education throughout the country, eliminate illiteracy, and develop special training programs to fit unemployed workers for employment in expanding industries.

¹⁶ Paragraphs 97-266 and Recommendations 19-78 treat of measures to improve technical agriculture, economic measures to improve agriculture, and fisheries.

(270) The United Nations Educational, Scientific, and Cultural Organization is concerned especially with the improvement of education and may be in a position to assist the Greek Government to devise measures needed in this field.

Recommendation 80: Expansion of Industry

It is recommended that in co-operation with appropriate international organizations, the Greek government develop technical and financial assistance to speed industrial expansion and improvement parallel to that recommended in this report for improving agriculture.

(271) Both the Economic and Employment Commission of the Economic and Social Council and the proposed International Trade Organization, should eventually be in position to provide assistance along the lines recommended. In addition, the International Bank for Reconstruction and Development might itself develop a technical engineering and industrial staff which would be able to provide some assistance.

Recommendation 81: Emigration

It is recommended that the Greek Government explore the possibility of meeting the problem of the unemployed population to some extent by developing greater opportunities for emigration of some persons to other countries where there are manpower shortages or undeveloped resources in need of workers, through direct negotiations with the countries concerned and possibly with the co-operation of the Economic and Social Council of the United Nations.

(272) There is a shortage of manpower in many parts of the world, including some countries of Europe, the Middle East, and the Americas. Many Greek workers are skilled in intensive agriculture, masonry and other construction crafts and small industries, and merchandising. Admission of these workers and eventually of their families would help the countries receiving them to develop their resources and aid in relieving unemployment in Greece.

Recommendation 82: Improvement of Health

It is recommended that the government of Greece enlarge and extend its present effort to deal with malaria and other chronic diseases, and seek the aid of appropriate international institutions to this end.

(273) Many parts of Greece have suffered in the past from malaria, skin infestations, and other chronic diseases which shorten life and lower productivity. Notable progress has been made with the help of the Near East Foundation and more recently with that of UNRRA, especially in eradicating *Anopheles* mosquitoes and household pests with DDT. The new World Health Organization will be in position to

provide continuing international advice and assistance. Vigorous continuation and enlargement of such efforts to control disease constitute an essential part of a broad development program.

Recommendation 83: Reform of the Civil Service

The Mission recommends that the Greek government put into effect, by a series of gradual steps, a reform of public employment and civil service, to include the setting up of a strict merit system, reduction in the number of employees with insufficient work, the ending of political interference in the appointment to discharge of civil servants, the raising of salaries to living levels commensurate with incomes for similar work in other occupations, improvements in efficiency of governmental administrators, and the establishment of citizens' advisory boards. The Greek government should consult with, and use the assistance of experts from the proposed United Nations Advisory Mission for Greece in working out the successive measures needed to implement this recommendation.

(274) The measures proposed in this report will place greatly increased responsibilities on the public officials of Greece. They will have the responsibility of handling large funds and making important decisions for public development projects. They will have considerably increased responsibilities, in finance, in buying and selling, and in the Agricultural Bank. They will have important new responsibilities for public leadership in their work in research, education, and extension. Specialized training will be needed for many of these posts, requiring additional years of formal training and experience to acquire the necessary expertness. Complete integrity and unquestioned devotion solely to the general public welfare must be characteristic of the entire public service, so that there can be no charge or even suspicion of favoritism or graft in carrying out these activities so important to farmers and the entire nation. . . .¹⁷

Recommendation 84: Reform of Taxation

The Mission recommends that the Greek government adopt a policy of reforming its tax system, with the objective of shifting as rapidly as possible from taxes which bear heavily on low-income farmers and workers toward more emphasis on taxes which bear on those better able to pay, such as taxes on income, inheritances, property rents, luxuries, etc.

(278) As a result of inflation and the great shifts of income in Greece, the Government was forced to place more reliance on indirect taxes, so that present Greek taxes fall heavily on poor people, and far less heavily, in proportion to their income, on the well-to-do. The Mis-

¹⁷ Paragraphs 275-277 spell out the manner of improving the civil service.

sion believes that a return to greater emphasis on taxes which bear more heavily on those best able to pay is essential to the success of the broad program of development it is recommending.

(279) The present system of taxation in Greece is very complex. There are taxes on production and consumption at all levels, including export taxes on farmers' sale of tobacco, wine, and oil; local taxes on movements of farm or manufactured products out of, or into, industrial towns, cities, and ports; taxes on retail sales of cigarettes, wine and spirits, and gasoline and kerosene; import duties; and large monopoly profits on salt and matches.

(280) Although there are some taxes on profits, rents, and real property, such direct taxes yield only 15 per cent of the current national ordinary revenues,¹⁸ while customs, excise, commodity, public monopoly revenues, and other indirect taxes make up the balance. In addition, most local revenues come from commodity taxes. Over four-fifths of the total tax revenues thus come from taxes which either reduce incomes to producers (especially farmers), or raise costs to consumers (mostly farmers and low-income city workers). Less than one-fifth of the taxes is of the type that bears primarily on well-to-do persons receiving large incomes.

(281) *Present taxes reduce production.* By taxing almost every step in production, transportation, and trade, the difficulties Greece faces are intensified. Instead of encouraging each region to specialize in producing the products for which it is best suited, production and interchange is made difficult and expensive. A substantial part of the prosperity of the United States of America is due to the fact that products can move throughout the country without paying any internal tax or duty on their movement. The best use of the resources of Greece is gravely limited by its archaic and anachronistic taxes.

(282) The tax structure is responsible, in part at least, for the present exceedingly unequal distribution of wealth and income in Greece, far less equal than that in more highly industrialized countries. In every part of the country, the great majority of farmers are poverty-stricken and destitute. City factory workers or public employees, earning mostly not more than 5,000 to 10,000 drachmas a day, are not in much better shape. Yet it is on these two classes, farmers and low-income city workers, that present taxes fall most heavily, for they make up over 95 per cent of the population.

(283) At the same time that this widespread poverty exists, the stores are full of all kinds of goods at high prices, and the restaurants

¹⁸ Memorandum of the Greek Government to the Temporary Sub-Commission on Economic Reconstruction of the Devastated Areas (Economic and Employment Commission, Economic and Social Council of the United Nations), Part II (London, August 26, 1946), p. 50.

are thronged with well-dressed people, enjoying the good food and wine, who live very comfortably despite the poverty all around them. Yet the tax burden falls on them far less heavily in proportion to their incomes than it does on the low-income farmers and workers.

(284) *Increased production must be balanced by increased consumption.* Over the long period, it will do no good to increase Greek farm and factory production unless the increased production can be moved into consumption. It will not pay farmers or businessmen to expand the output of Greek farms and factories unless Greek citizens can buy and pay for the increased supplies. A program of expansion in Greek production backed by foreign loans will not work unless the loans and investments are accompanied by reforms in the Greek system of taxation.

Recommendation 85: Procedure in Tax Reform

It is therefore recommended that the Greek government undertake to put into effect, by a series of gradual steps, reforms in its tax system to make it less regressive, and more like that of the United States of America and the United Kingdom, and other developed countries.

(285) While the Mission is not qualified to state the precise taxes which should be abolished, reduced, established, or increased, it believes that the changes should be in the direction of abolishing entirely all export taxes on commodities, and all internal local movement or port taxes on the production, shipment, or sale of commodities within or between any part of Greece, of greatly lightening the dependence on import duties and on internal revenue taxes such as those on cigarettes and wine, and on public monopoly profits on salt and matches; of greatly increasing the dependence on profit, income, inheritance, and rent taxes; and of covering local expenditures from such national taxes or from parallel local taxes of the same type as those recommended.¹⁹

¹⁹ Pending the time that Greek bookkeeping and accounting methods are modernized sufficiently to make collection of profit or business income taxes practicable, some progress toward progressive taxation might be made by expanding dependence on various types of luxury taxes. For example, taxes might be imposed on restaurant meals somewhat as follows (under existing price levels):

<i>Cost of Meal Including Service</i>	<i>Tax on Entire Bill</i>
Under 4,000 drachmas per person	0 per cent
4,000 to 7,500 " " "	10 "
7,500 to 10,000 " " "	15 "
10,000 to 15,000 " " "	20 "
Over 15,000 " " "	25 "

Similar progressive taxes on other luxuries—amusements, jewelry, expensive clothing—at similar progressive systems of rates would help place the tax burden on those who can best afford to pay.

(286) The detailed changes in the tax structure should be worked out by the Greek government in consultation with, and with the advice of, the fiscal and financial experts of the United Nations Advisory Mission to Greece recommended elsewhere in this report. The Greek government and the experts of the United Nations Advisory Mission should make joint studies toward putting these recommendations into effect.

(287) In the past, earnings of Greek citizens from foreign operations have often largely escaped taxation by the Greek government. This has been notably true of incomes derived from the Greek Merchant Marine. Special efforts should be made to devise methods to ensure that those citizens who benefit from the protection of the Greek flag and laws pay their proper share of the costs of operating the government. . . .²⁰

Industrialization in Some Detail²¹

Possibilities for Industrial Development

(43) Greece is primarily agricultural, and up to the war rural areas were always the dwelling place of the surplus population. At present, however, due to influx from ruined villages and towns, the metropolitan centers are greatly swollen above pre-war totals, and there is heavy unemployment. If Greece is eventually to provide effective employment for the many thousand farm families not needed to operate her farms efficiently, and for the unemployed labor already in her cities and towns, there must be a great expansion of activity and employment in other occupations. New and expanded food and other processing, manufacturing, and mining industries can provide the basis for this increase in employment. At the same time, expanded production or income in agriculture will provide more products to handle and process, and create expanded demands for clothing, farm and home equipment, medical services, and other city products. Expansion in nonfarm activities—transportation and communications, wholesale and retail trade, building and construction, professional and personal services—can provide effective and useful work for a much larger number of workers. Production in agriculture and in industry should expand at the same time with expanding import and export trade. That will mean that existing con-

²⁰ Paragraphs 288-303 and Recommendations 86-89 deal with the timing of the proposed program, and proposals for international action. Appendices A-C are concerned with "Water Resources and Development," "Livestock and Livestock Products," "Crop Husbandry," "Soil Fertility," "Seed Production," "Phytopathological Service," "Fisheries," and "Statement of Principles." The first 42 paragraphs of Appendix I, "Economic Problems," discuss measures to check inflation, to facilitate exports, long-range objectives for agricultural development, and nutrition and improved agriculture.

²¹ From Appendix I.

cerns grow to do much more business, while many new concerns will be established and will succeed. Many more proprietors, managers, accountants, operatives and mechanics, and all other industrial and commercial occupations will be needed, with corresponding opportunities for useful work and careers.

Manufacturing Only One Part

(44) The extent to which industries other than manufacturing can help provide new nonfarm employment may be illustrated by data for Greece, France, and the United States of America. These give the distribution in each country of the workers engaged in gainful employment. (See following table.)

PRE-WAR DISTRIBUTION AMONG VARIOUS INDUSTRIES
of Each 1,000 Workers: Greece, France, and the United States of America

<i>Categories</i>	<i>Greece</i>	<i>France</i>	<i>U.S.A.</i>
	<i>1,000 workers</i>	<i>1,000 workers</i>	<i>1,000 workers</i>
Agriculture and forestry	600	354	186
Fishing	6	3	2
Mining	3	21	20
Manufacturing and construction (factory and artisans)	178	330	280
Transportation	44	38	69
Trade	77	114	167
Finance	10	13	32
Personal services (hotels, laundry, cleaning, barbers, domestic servants, recreation)	24	41	98
Professional services (medical, engineering, legal)	40	30	73
Public employment	18	56	39
Other and unspecified			34

(45) There are many different lines of useful nonfarm employment in a well-developed modern society. Out of every 100 workers in nonfarm occupations, 45 are working in manufacturing in Greece, 41 in France, and 34 in the United States. Apparently, for every 10 men for whom new jobs are made in manufacturing in Greece, at least 11 others can be absorbed in new jobs in other related nonfarm employment, and possibly eventually as many as 20 men.

Opportunities for Manufacturing

(46) While it is not the province of the present Mission to recommend specific industrial developments, some comments on the apparent possibilities may be suggested.

[Processing Industries]

(47) There is obvious need in Greece for immediate increases in industries to process domestic farm products. Cheese factories, cold storage plants, improved cotton gins, wineries, olive oil pressing plants and refineries, oilseed pressing plants, canning plants for vegetables and fruit, vegetable and fruit packing plants, potato dehydration plants, and tanneries are needed now in many villages and towns, and would materially increase the value of the local production. Grain-drying plants and carob-processing factories are needed also. As agriculture develops along the lines recommended elsewhere, still more such plants will be needed and, in addition, other plants for evaporating and canning milk, for slaughtering livestock, processing meat, and for sorting, packing and possibly freezing fruits and vegetables for export shipment.

(48) Cotton and silk weaving and spinning mills can be further expanded, and likewise the manufacture of clothing. This, with the wider introduction of woolen spinning and weaving mills and of woolen clothing manufacture on a mass production basis, should make it possible for workers and peasants to buy ready-made clothing at reasonable prices and so partially remove from the village home one of the many present arduous tasks of the women. Refining and processing of olive oil and other oils, bottling of refined oil and olives, and production of an improved olive oil soap, all may offer opportunities for more valuable products and expanded exports.

[Building Materials]

(49) There are already a considerable number of sawmills and woodworking plants, brick, tile and lime kilns, and some cement factories in Greece. Over the very long pull, restoration of the forests, as recommended elsewhere, may provide more raw material for fuel and lumber. Meantime, imported logs might serve as a basis for expansion of the woodworking industries, especially at port cities, including millwork (doors, windows, staircases, etc.), plywood, and possibly even prefabricated parts for houses of wood or metal. Native gypsum offers opportunities for wallboard for low-cost housing. Cement is already manufactured at several points, and can be turned out in quantities above current demands. Tremendous quantities are needed both for permanent surfacing of main highways, and for rural and urban housing. If costs and selling prices are brought down to reasonable levels, which may involve both near-capacity output and the use of imported oil or coal at port cities, and if funds for housing and construction are made available, the consumption of cement can expand very greatly, and provide many more jobs in construction. With the abundant local supplies of sand, gravel, and stone, the manufacturing of concrete blocks also may

prove profitable, to provide an inexpensive material for building industrial buildings and dwellings quickly and with relatively little labor. Cement and asbestos can also be used to produce a light travertine-like wallboard, which might prove very useful in Greece.

[Fuels and Power]

(50) Greece is poor in fuels; and imported oil, gasoline, and coal constitute one of her heavy foreign expenditures. Greatly expanded production of hydroelectric power, as recommended elsewhere in this report, offers inexpensive power both for industrial development and for increased farm and consumer use. There are substantial supplies of lignite in certain regions, and these should be more generally burned, especially in the plains villages where manure is now used largely for fuel. Manufacture of stoves, specially designed to burn lignite efficiently, and proper drying of the lignite, would both provide employment and facilitate the use of lignite. Plans have been developed to produce nitrogenous fertilizers by the use of lignite. Further technical study of this is needed to determine its economic feasibility. Production of electricity by burning lignite at mine mouth may, in certain areas, be economical and provide stand-by power needed to supplement hydro-electric power.

[Metal-Working Industries]

(51) Lack of coal has thus far made possibilities of pig-iron and steel production very limited. There are, however, excellent opportunities for the further development of iron- and steel-using industries based on imported raw or partly finished iron, steel, or light metals, especially when adequate electric power is available. Products such as wire, scales, farm tools, and simple farm equipment (plows, harrows, sprayers) are already being made. Their production could be materially expanded. Hardware for buildings, heating and plumbing equipment, lighting fixtures, and pipe are made to some extent and production could be increased greatly with suitable equipment. Production of consumers' metal products of simple types such as tableware and kitchen utensils could be greatly expanded. Simpler machines, such as irrigation pumps and Diesel motors to run them, and small Diesel motors for marine craft, are already being made and many more are urgently needed. Certain types of transportation equipment, such as wagons, boats, and small ships, and bodies for trucks and freight cars, offer much opportunity for expansion. Certain mass-produced articles that require very large volume for lowest costs per unit, and other articles that involve very high precision operations, probably can best be imported from abroad. The first group includes radio tubes, automobiles, tractors, locomotives, threshers, harvesters and combines, typewriters, and sewing machines. The second includes watches. scientific instru-

ments, machine tools, and textile machinery. Greece has high-grade bauxite and magnesium carbonate deposits and many Greeks want to produce their own aluminum and magnesium. With the high electricity requirements, however, and the superabundant capacity to process aluminum and magnesium elsewhere, it is doubtful if it would pay Greece to use her limited power supplies for this purpose, at least not for many years ahead.

[Light Industries]

(52) A number of light industries such as paper and paper products, containers, printing and stationery, and publishing are already well developed. As buying power increases, markets for such products should expand rapidly, and justify a further expansion in these lines.

[Artisan Shops and Home Industries]

(53) A considerable part of the industrial products now made in Greece are produced in small village shops with only one to three workers, or in the homes. Examples of products made in such ways include wooden chairs, plowshares, rope, copper and tin ware, sickles, horseshoes and horseshoe nails, saddles, leather and cloth shoes, bread, rolls, and many other articles and foods. Despite their small size, these shops in some cases make effective use of electrical blowers, grinders, drills, etc., and of mass-production techniques. In other cases (as in the production of nails or rope) use of hand methods is slow and costly as compared with modern automatic machines. These shops, often selling direct to the ultimate consumer, have low overhead and distribution costs compared to large factories. As buying power expands in Greece, there probably is good opportunity for a material further expansion of many of these traditional village industries. In addition, there may be good opportunity to expand home industries in many regions. Thus clothing can be manufactured by cutting up the cloth by cutting machines at some central point, and turning the pieces over to home workers to sew and finish the garments in their homes, on a piece-work rate of pay. Even in such home industries, production can be greatly increased if the workers can be provided with some home equipment, such as sewing machines or electric irons.

Opportunities for Other Industries

(54) As new factories are built, and more men and women start working in them, more stores and shops will be needed. Enterprisers to start these other industries will not be lacking. Almost every Greek is a potential merchant—as evidenced by the cigarette boys, artificial-flower girls, and many other small-scale street vendors.

(55) Enlarged employment in basic industries and increases in farm output and efficiency will put more income in the hands of both farmers and industrial workers, provide a larger volume of raw materials and finished products to be transported and merchandised, and expand demands for the other services that nonfarm industries can provide—medical, personal, educational, recreational, etc. Warehouses and cold-storage plants are needed. Many more stores, hotels, and restaurants must be built and manned. Recreational facilities, resort hotels, and scenic drives must be constructed and operated, both for the enjoyment of the Greek population and for tourists from abroad. Cleaning and pressing and laundry establishments should be increased. Repair shops and service agencies for automobiles, tractors, radios, and automatic and electrical equipment will be needed. Meeting these demands will require expansion in facilities to educate and train specialists in many fields including doctors, dentists, nurses, engineers; teachers of general and advanced education, vocational agriculture, and home economics; chemists, animal husbandmen, veterinarians, bacteriologists, economists, statisticians, and many other professions. Expanded and new public agencies and institutions will be needed to provide this training.

Tourist Industries

(56) Greece has unique resources for development of an extensive recreational industry, not only for her own citizens, but also for visitors from other countries. The intermingling of mountain and sea, with sharp outlines and contrasting colors brought out by the clarity of the air and the brilliance of the light, creates scenic beauty of a unique quality. The seacoasts, mountains, lakes, islands, and choice spots for swimming and boating in the incomparable seas which lap her coasts, the colorful traditional dress and picturesque costumes of the country people, the monuments of ancient cultures that laid the foundation of Western civilization, offer unexcelled natural beauties for an extensive resort industry, particularly in the prolonged autumn. The winter and spring climate is mild but invigorating, and the summer is cool and pleasant especially when enjoyed in the beauty of the Aegean, Ionian, and Cyclades Archipelagos. Throughout Greece, the good nature and traditional hospitality of the Greek peasant, to which the members of the Mission can testify themselves, leaves a lasting and unforgettable impression.

(57) Greece has hitherto appealed mainly to a few visitors of scholarly tastes, attracted by the historical interest of such famous places as Athens, Olympia, Delphi, Mycenae, Mistra and Cnossus, and willing to undertake more or less arduous journeys to reach them. Now that air transportation is bringing Greece within a day or two's travel of the most developed nations, Greece might well specialize in developing a

fall and winter tourist season which would capitalize on her mild winter climate and clear sunny days. To do this it would be essential to restore her roads and rail and sea passenger transport to make possible comfortable and even luxurious travel; to re-equip and modernize her previous luxury and resort hotels; and to build many more hotel, restaurant, resort, and travel facilities of the same type. A plan for the development of the tourist industry should be part of the program of reconstruction and development which the country should try to carry out with foreign assistance as soon as economic and political stability are assured.

(58) In addition, public lending agencies have recognised that recreational industries can qualify as developmental projects equally with facilities for more mundane production. The government itself might well give much more attention to aiding and encouraging the development of recreational and resort activities, and even establish special public agencies to ensure that everything possible is done to facilitate their development.

Relation of Industrial Development to Population Growth

(59) Vigorous industrial development could provide effective employment for the surplus workers now in rural villages, and for the additional farmers and farm workers who can be released gradually as improved farming practices and farm machines are put into use. In addition, the growth of population will provide still more people ready for work. Between 1928 and 1940 the Greek population increased from 6,205,000 to 7,336,000 persons. Ignoring net migration, the population thus was growing at an annual rate of $1\frac{1}{2}$ per cent per year. Better public health, which should result from malaria and pest control and other health measures included in the proposed program, would probably increase the net rate of population growth for a time in the future, although eventually improving living standards, compulsory education, and legal restriction of child labor might tend to slow it down again as similar developments have done in many other nations.

(60) It would take at least 25 years to carry through the general program of agricultural improvement and modernization and of industrial development and progress proposed in this report, and outlined in the preceding paragraphs. During that quarter-century there would be a substantial further growth in Greek population as a whole, adding possibly a million more workers to the national working force. For the program to be fully effective, therefore, the expansion in nonfarm industry would need to be rapid enough to provide employment for the net increase in population, for the workers now unemployed, and for the underemployed workers in agriculture who would be displaced by mechanization and by increase in farm size. If emigration of workers

and their families from the country (as suggested in Recommendation 81 is resumed on a large scale, that would correspondingly reduce the increases needed in domestic employment; but opportunities for such large-scale migration do not seem bright considering past and present attitudes in most countries to which such migrants might go.

(61) Greece today has 60 per cent of its adult workers engaged in agriculture. Among other more developed countries with similar inadequate agricultural resources, Italy has about 40 per cent in agriculture. Many countries with materially better agricultural resources per capita of population than Greece have even smaller proportions in agriculture; France has under 38 per cent, while Denmark and Sweden have about 30 per cent. The experience of various countries gives some indication of the rate of progress which might be possible in shifting from an overpopulated country with inadequate industry, such as Greece is today, to a country with better developed industry, a larger proportion of its workers off farms, and better standards of living for all its people. During the past century, many countries have shifted from about Greece's present position, to a more fully developed economy. The periods of time required for this shift in a few selected countries are indicated in the table below.

TIME AND PERIOD OF SHIFT TO GREATER INDUSTRIALIZATION, IN
SELECTED COUNTRIES ²²

Country	Initial state		Improved state		Period of time required
	Date	Farmers as proportion of all workers	Date	Farmers as proportion of all workers	
		Per cent		Per cent	Years
United States of America	1870	47.4	1920	26.3	50
Sweden	1890	49.6	1936	30.6	46
Denmark	1890	40.6	1930	31.2	40
Japan	1876	77.2	1936	43.7	60
Union of Soviet So- cialist Republics	1928	80.	1938	58.	10

(62) The data available do not go back, for many developed countries, to the time when they were as largely agricultural as Greece still is. In 1870 for the United States of America and in 1890 for Sweden

²² U.S. Census Reports, various years. *Statistisk Arbok* (Sweden, 1942). *Statistisk Aarbog* (Denmark, 1941). Schumpeter, Allen, Gordon, and Penrose, *The Industrialization of Japan and Manchukuo* (1930-40), pp. 65, 76, 77. Socialist Agriculture of the USSR, estimated from table in Statistical Collection, Moscow, Gosplan-Izdat (1939), p. 6.

and Denmark, each country had about half of its workers engaged in agriculture. In 40 to 50 years following, these countries reduced the proportion in agriculture to around 30 per cent or less, even though their total population was growing rapidly; and they correspondingly expanded their workers in nonfarm industries from about 50 per cent to about 70 per cent of the total workers. In the Union of Soviet Socialist Republics, the proportion of workers in agriculture was reduced from 80 per cent to 58 per cent in a period of 10 years. This increase of from 20 per cent to 42 per cent in the proportion of workers in nonfarm industries marked as great a shift toward industrialization in 10 years as the other countries had made in 40 years. The economic progress in the Union of Soviet Socialist Republics under her first two five-year plans was made under rigorous public control, with little regard for the rights of individuals or of personal liberty. The slower rate of growth made in the other countries took place largely in the past century, under social growth as part of the Industrial Revolution of the early nineteenth century, and with very little public direction or stimulation. National leadership, which sees clearly the objectives to be obtained, and which stimulates adjustments towards modernization and stimulation of agriculture and industry, using measures such as those outlined in this report, should be able to speed up greatly the rate of change in Greece over that achieved in the last century, while still retaining democratic freedom of choice for the individual, as recommended in paragraphs 92 to 93 of the main text. Given such national leadership, it seems quite reasonable to expect that Greece could increase the proportion of her workers engaged in nonfarm employment from its present level of 40 per cent, to one of 60 per cent or more, within the next quarter-century, without interfering with either individual freedom of the farmer or worker, or the freedom of action of businessmen in private enterprises.

Possible Investment Required

(63) Carrying through the 25-year development program would involve developing modern facilities for several hundred thousand farms, investing 400 million dollars (at present prices) in water-control projects and hydroelectric works, and providing capital equipment for tools, and machinery, and working capital for around a million additional workers in nonfarm industries and services. A very substantial capital investment will be needed during the quarter-century to provide the machinery, equipment, and plants needed for the enlarged and re-directed economy.

(64) A substantial part of the capital required can be provided from savings in Greece, once the economy is again functioning satisfactorily. Even part of the foreign exchange expenditures for imported equipment may be made from foreign exchange earned by the expand-

ing export industries, after the program for the intensification of Greek agriculture and the expansion of specialized crop exports has begun really to bear fruit. By the time the national income of Greece has doubled its pre-war levels, domestic savings of only 10 per cent of income would mean 150 million dollars of products and labor a year for investment, which would provide all the domestic capital needed for the development program, and possibly also part of the foreign exchange. Also, a substantial part of the foreign investment required for the balance of the imported capital should be readily available from foreign private investments, both personal and corporate, once political and economic stability has been restored in Greece and a vigorous economic development is under way.

(65) In the first few years of the development program, however, foreign financing will be needed to cover all the foreign exchange expenditures for imported materials, equipment, and technical services, and perhaps also for a substantial portion of the imports of foodstuffs and other consumption goods resulting from the internal expenditures for labor and domestic materials, gravel, cement, etc. Substantial foreign financing, as recommended in the body of the report, is essential to getting the development program started and well under way. Once that start has been made, and the income and foreign exchange assets of the country reach better levels, the program can be carried on with less and less public international financing. As production and specialized exports increase, the foreign loans can be liquidated on an amortization basis out of the increased production and income they have helped to create.²³

²³ Paragraphs 66-108 deal with civil service reforms, reforms of taxation, and major export crops.

Japan: Diagnosis Without Therapy

Introduction

ON JULY 4, 1947, the Japanese Government issues its Official White Paper on *Economic Conditions of Japan*. This chapter includes approximately one-half of this lengthy document: Part I—the Overall Analysis and Part II—sections 1 (Prices, Wages, and Cost of Living), 3 (Production), and 6 (Labor and Employment). We have omitted sections 2 (People's Livelihood), 4 (Transportation), 5 (Public Finance and Banking), 7 (Foreign Trade), and Part III (Conclusion).

Diagnosis precedes prescription. The Japanese White Paper is little more than a diagnosis of economic disease, with little attention given to therapeutics. An elimination of the black market as a means of keeping prices down and assuring solvency for the household is perhaps the most important prescription offered to the ailing patient. The report, written in colorful language, is presented as released by the Japanese government, except for a few glaring grammatical errors which might irritate the sensibilities of some readers. Here, then, is an examination of the Japanese economy, weakened by a decade of war, and further debilitated by the inflation and mal-provisioning of markets, the aftermath of an exhausting war. Facts are the clay out of which plans are formed: the Japanese White Paper gives little more than the clay, and clay with many imperfections.

Deficits are a feature of the post-war Japanese economy: in government, in business, and in the individual household. Government incurs a rising deficit, due to the upward movement of prices and costs, not matched by corresponding gains in revenue, and the rising burden of

subsidies to keep business in operation and to provide some help to consumers. Profits are large in the black markets; but they cannot be channelled to the Treasury. Deficits of many industries are explained by rising costs not equalled by increases in official prices and subsidies. For the average household, the rise in prices reduce real income below a level which will assure a minimum standard.

Like many sick economies in the post-war world, Japan suffers from (1) deterioration of plant and health standards; (2) galloping inflation; (3) declining standard of living; (4) reduction of output and productivity; (5) a monetary system that reflects a paucity of capital; (6) latent unemployment; (7) an imbalance in foreign trade.

Here we amplify briefly. Inventories are low; maintenance and replacement at sub-normal levels; deforestation far ahead of afforestation. In ten years, children in schools have lost one year in weight and height: the weight and height of a ten-year-old child in 1947 corresponds to that of a nine-year-old in 1937.

The measure of inflation is the price level. Prices of staple foods at one point were up but 3-6 times; but at the same time, black market prices were up 27 times. About 20-40 per cent of the food was being purchased on the black market, with expenditures on these markets accounting for most of the cash outlay on food. A comparison of the cost of a basket of goods available to the average consumer yields a rise of prices of 60-70 times over a period of ten years. (This reflects both official and black market prices properly weighted). Such comparisons do not allow for the unavailability of goods in 1946-47 that might have been had in 1937.

With the deterioration of plant and the decline in output, living standards are drastically reduced. From a per capita consumption of 2,105 calories in 1941, the actual ration in 1946 had been reduced to 1,100 or less in six large cities. Whereas the average annual per capita consumption of textile goods was 11.2 pounds in the pre-war period, the amount available to the general public (some workers received somewhat more) was but 1 pound in 1946-47.

The source of most of Japan's difficulties is the low level of output—a decline in industrial production in 1945 to 10 per cent or less of 1935-37 output and a recovery to less than 30 per cent by the end of 1946. Failure to utilize stocks of basic materials in 1945-46 to reconstruct the economy rather than to produce non-essentials, the Japanese Government admits, was a serious blunder. Among the causes of the production crisis were uncertainties created by inflation, the breakdown of transportation, shortages of basic materials, and the crisis in power. These are, indeed, all interrelated. A shortage in coal, for example, explains in large part the failure of the railroads to recover, and the shortage of power helps account for the inflationary pressures.

Money is excessive, not alone because the government borrows to meet its needs, but also because, despite the retarded rate of recovery, business borrows heavily. Large loans by business reflect a shortage of savings that is symptomatic of late stages of inflation; in such periods, working capital disappears, and in general inflation corrodes the economy.

Low levels of output are not to be explained by unemployment, which in 1947 was at a modest level. With the unavailability of consumers' goods and working capital, there is, however, much latent unemployment. Workers are content to work part-time, loaf on farms, and do all kinds of unproductive work which will yield them merely enough to pay for obtainable rations. It seems costly to the worker to work full-time and earn large money wages which in large part cannot be validated on commodity markets. Spectacular declines in man-hour output—two-thirds, for example, in coal—also help to explain the low level of output.

Foreign trade is a soft spot. In 1946, exports were \$120 million and imports \$300 million, with exports but 6 and imports 17 per cent of 1936 trade. With insistent demand for food and raw materials from abroad as a condition of recovery in production, it is clear that a solution for the balance of payments problem must be found.

Over-all Analysis ¹

Prices, Wages, and the Cost of Living.

(1) Recently, the government announced its Emergency Economic Measures, thereby informing the people of its policy to tide over the extreme economic difficulty now besetting our country. The main features of these measures lay in the fact that they were to be carried out faithfully at any cost. But for the co-operation of the people, however, the government is unable to attain any success in this connection. A mechanic engaged in repairing a damaged automobile is required to deal with an insensible object with which he has no connection of feelings. The government which is required to effect the economic resuscitation

¹ Japanese Government White Paper on *Economic Condition of Japan* (July 4, 1947). The editor has taken some liberties with the Report—at least enough to change the English where a reader's sensibilities might have suffered greatly. But on the whole the choice was made to retain the original form as much as possible.

of the country, however, it not dealing with persons keeping aloof from it, nor with any lifeless object. The government that proposes these economic measures and the economy of the country for whose revival all efforts are being exercised are closely connected with each other. To speak more accurately, the people who form the subject of the national economy must behave themselves as the proposers of these economic measures, and every one of them must exercise their very best to attain the required success through the medium of the government which they have selected for themselves, giving constant help to it.

(2) In view of the present circumstances, the government has worked quickly, if not fully adequately, to inform the public of the present economic condition of the country based on all the data available at this moment, so that it may study and solve the relevant questions in collaboration with the people. In order to attain any success in this respect, everyone must be given an adequate knowledge of the national economy as though it were a matter of their own household economy. Unfortunately, our country falls far behind any other civilized country in statistics, which makes it impossible for the government to furnish the people with an accurate knowledge. But, is it not more important for us to do the best we can in this connection and give them the best available knowledge without delay than to remain inactive waiting for the completion of perfect statistics until it is too late?

(3) As prerequisites for the following discussion, let us lay stress on two important facts. The first is the necessity to grasp the movement of our national economy in a dynamic manner. The other is the necessity of an over-all analysis of our national economy.

(4) To grasp the economic movement of our country in a dynamic manner means to trace the economic development of our national economy in the past on the one hand, and to consider the economic measures for the future, taking into account the results of our efforts.

It cannot be said that we have yet fully realized the profound misery our military leaders have brought upon us by starting a reckless war against the will of the people at large. Furthermore, we cannot say that in the two years that have elapsed since the end of the war we have done all that we might have done. In March of last year, when the government took measures to regulate the currency through the issue of the new yen notes, necessary materials in stock were not so scarce as at present, and there was an excellent chance for the revival of our national economy. Nevertheless, no sign of production improvement has since been observed, while danger from inflation has steadily grown bigger and our country now stands under great economic difficulty. This is because positive measures have not been seriously considered, and no timely efforts have been exercised to restore equilibrium and adjust order in our national economy. Thus, the economic difficulty as at present has

come about in a manner as stated above. Among the measures the government is now following, or is going to follow, are many which, if taken sooner, would have been far more effective in the economic revival of our country.

Now, in making a dynamic analysis of our national economy for the future, we shall have to work on a more or less inaccurate forecast. We presume, however, that the situation will steadily grow brighter provided we always do our utmost to proceed along the right path. For instance, the productivity of labor which at present is fluctuating between 30 and 40 per cent of that of pre-war days, as well as the balance of our international account, which is now very unfavorable, may be considerably improved by the sincere efforts of all the people. It is by no means advisable to close our mental eye and refuse to foresee the possible success of our urgent economic measures. This is not the way dynamically to grasp the movements of our national economy.

(5) As the second prerequisite, special importance must be attached to the over-all analysis of our national economy. In order that everyone of the people may correctly judge the economy of his country as if it were his own household economy, he must, first of all, grasp the entire economy of the country in view of the mutual relations among various factors. Let us take an example.

If we were required only to make both ends meet in our national finance, we might concentrate our efforts on the adjustment of national finance alone, entirely disregarding all other matters in the country. And we might attain some success in adjusting the national finance in a manner as stated above. But, in order to achieve our immediate purpose, some of the important industries that are dependent on national subsidy would be forced to go into liquidation. On the other hand, heavier taxes might be levied on consumers at large, immediately endangering their family circumstances. However, to jump at the conclusion that the national finance may be left unbalanced, so long as the accounts of enterprises and individual households are balanced, is a worse misconception. Suppose that any person ordered to clean a room sweeps in all the dust under a desk. The room may appear clean enough to a careless observer. But, it cannot be said to be really clean. This is also the case with national economy. We must, first of all, grasp the reality of our national economy as a whole. If ordered to clean a room, we must not allow any dust to remain unswept under the desk, or behind the chest of drawers, or in any part of the room. Everything, however, has its vital point, and in order to get hold of the vital point, we must first grasp the whole thing in consideration of the interrelations between its parts.

(6) If we were to grasp the reality of the national economy in view

of its relations with that of our own family circumstances, we may divide it into the three départements as follows: The finance of the government; The private enterprises (including the management of farming); The household economy of the people.

The three items mentioned above are closely connected with one another. If we compress any one, one of the remaining two will be swollen in proportion. If we touch one, one of the remaining two will be affected. Let us, however, look into the latest balance of the accounts coming under the respective items.

(7) The balance between the monthly flows of money into and out of the Treasury cannot be said, in a strict sense, to represent the balance between the revenue and expenditure of national finance, but the extent of the latter may be indicated, though roughly, by the former. According to our investigations, the monthly excess of government disbursements over incomes, since the beginning of the preceding year, has been as follows:

<i>Average</i>	<i>(In million yen)</i>
April-June 1946	5,217
July-September 1946	3,155
October-December 1946	3,309
January-March 1947	4,520
April 1947	876
May 1947	5,689

When the above figures are considered, with this fact taken into account, it will clearly be seen that the movement of figures after May, if it may not show an accelerated ratio, does not at all allow an optimistic estimate. For purposes of reference, net total of the revenue and expenditure of the General and Special Accounts (including transfer bonds amounting to 21 billion yen) for the preceding year are tabulated below.

	<i>(In billion yen)</i>	<i>Pct.</i>
Expenditure	192.2	100
General revenue	115.6	60.2
Deficit	76.6	39.8

As the above figures show, the deficit amounted to 39.8 per cent of the fiscal expenditure.

(8) Regarding the financial accounts of important industries, two instances are given below:

(a) *Coal*. The difference per ton, between the cost of mining and the producer's price under official regulation has lately increased as follows:

(In yen)	<i>Producer's mining costs</i>	<i>Price</i>	<i>Deficit</i>
October 1946	389	220	169
November 1946	392	346	46
December 1946	433	246	187
January 1947	476	346	130
February 1947	540	346	194
March 1947	612	346	266

(Note: Mining costs are the crude figures as reported by major coal mines.)

In the single month of March, the deficit exceeded 400,000,000 yen.

(b) *Steel and iron.* As regards the steel and iron industry, the following total shows the financial conditions of the four companies concerned during the six months from last October to the end of March, this year, as reported by the companies.

	(<i>Million yen</i>)	(%)
Total revenues	1,258	67.6
Total expenditures	1,860	100.0
Deficits	602	32.4
Price stabilization funds	318	17.1
Net deficits	284	15.3

As the above table indicates, the total revenue is only about two-thirds of the expenditures and the government subsidies in the form of price stabilization funds are barely sufficient to cover about half of the deficits; in this way, the net deficits are really 15.3 per cent of the total expenditures.

(9) The deficits in the household economy are the cause of endless trouble to most of the working people in cities, as words "bamboo shoot livelihood" well indicate. There will be no need of statistical proof in this connection. However, according to the investigations made by the Price Board, the monthly average deficits in the household economy of working people in Tokyo are as follows:

	<i>White-collar Workers</i>	<i>Laborers</i>
Average monthly deficits during the latter part of 1946	Y179.57	Y186.94
January 1947	455.25	184.08
February 1947	344.44	122.31
March 1947	444.89	341.72
April 1947	131.97	* 52.75

(Note: The mark * denotes surplus.)

(10) Let us consider what it means that all of the three important component parts of the national economy are continually suffering from deficit for a considerably long period. It is no doubt an extraordinary

situation for a nation. To take an example of a household, the situation is that in which the master, the housewife, and the child are all short of money and over-spend it. If such a situation is prolonged—say, in order to go on like this, we resort to the following measures: first, we draw money from savings account; second, we sell property; third, we borrow money or receive gifts from other persons.

There is no other way except these. The first and the second measures, however, can be resorted to only by those who have savings accounts or property. They are not the measures open to all, neither can they be resorted to indefinitely. As to the third measure, it is not possible to borrow money unless one's credit is in good standing.

(11) We shall now go back to the case of a nation. The first measure, i.e., to draw money from savings account, has some different bearing for a nation from that for a family. In case of an individual, he can, by drawing money from his savings account, obtain more purchasing power, and thus more goods and services. In case of a nation, it does not increase materials of a nation if its people draw money from their savings accounts. That a nation draws money from its savings accounts means only this—that it draws on accumulated material stocks. It is true, of course, that a nation can import more goods if it can draw money from its account in the form of foreign currency, but this is out of the question for present-day Japan. The second measure, i.e., to sell property, implies, in case of a nation, that a nation sells abroad precious metals or art-objects produced or obtained in the past. The third measure, to borrow or obtain money from other persons, means that a nation borrows money from abroad or receives money or goods from foreign countries without compensation.

Japan is poor in natural resources and has, moreover, lost international confidence in attempting a useless war. It is as though a poor man provoked a quarrel with his neighbors. Being poor he has no money to draw from savings account, nor property to sell; having provoked a quarrel he cannot easily borrow money from neighbors. The Japanese people fully appreciate that none of the three measures is of much help to present-day Japan. In particular, the stock on which we can draw and property which we can sell have been well-nigh exhausted in two years after the termination of the war.

(12) There are still further difficulties. We referred to the over-expenditure of the master, the housewife, and the child. If a family is short of money even for purchasing absolute daily necessities, the consequence is that the expenditure of secondary importance, such as repairing and maintenance, is neglected or postponed. The repairing of the house or the child's sanitation is likely to be neglected. Such a situation would in the long run endanger the maintenance of family life—the same thing is true with the economy of a nation. Thorough repairing

and maintenance of machinery, replacing of worn-out rails, afforestation along with cutting down trees, immediate repairing of river banks—these are necessary in maintaining the national economy. Because excessive economizing in expenditure does not bear its effects in a short period, such expenditure tends to be neglected, especially when the national economy is extremely pressed, as in present-day Japan. The government should be well aware of the problem for the sake of the future of the land and its national wealth.

(13) It was stated above that three main fields of the national economy are all suffering from deficits. This does not mean, however, that all of the economic units composing the national economy suffer from deficits. If so, unfavorable balance of trade and a drawing on capital at the present rate would have been far exceeded. The fact that not a few businessmen have earned net profits entirely out of proportion is shown incompletely in statistics below. For example:

(a) Income payments to individuals classified by kinds of income during the year 1946 are estimated as follows:

	<i>(In billion yen)</i>				
	<i>Jan.- Mar.</i>	<i>Apr.- Jun.</i>	<i>Jul.- Sep.</i>	<i>Oct.- Dec.</i>	
Salaries and Wages	10.8	17.5	23.1	29.5	
Proprietors income	40.8	37.7	50.6	70.1	
Of which, Commerce	11.4	8.2	12.9	24.1	
Dividends and Interests	1.4	1.5	1.4	1.4	
Rents	1.3	0.9	0.7	1.2	
Total	54.3	57.6	75.8	102.2	

Income earned by people engaged in commerce decreased in percentage to the total after the switch-over to the new yen last year, but it immediately tended to increase again and in the fourth quarter 1946 it increased somewhat, if slightly, from 21% of the first quarter 1946 to 24.2%. This figure should be studied in comparison with the fact that people engaged in commerce occupy not more than 7.1% of the total gainfully employed population.

(b) The Consumer Price Survey of the Cabinet Bureau of Statistics is so conducted as to reflect actualities as much as possible without confining the survey to working people only.

According to one of these surveys made in Tokyo, January 1947, it is revealed that families whose monthly expenses exceed Y4,000 occupies 15% of the total and people included in this 15% consumed 38% of the total monthly expenses. So it can be easily guessed how a part of the people were leading fortunate lives if the fact that the so-called "Y500 limitation life" was still officially in force at that time, is also remembered.

(14) There remains no problem if such deficit in the national budget can be filled by deposits collected from such profitable fields

as mentioned above. From people belonging to these fields for which we have data, who are mainly engaged in transactions of goods or who are related with enterprises supplying services, it is difficult to collect taxes correctly against their true incomes. Furthermore, their consumption propensities are rather high; in other words, they tend to spend a high proportion of their income. We must admit, therefore, that it has been practically impossible to expect these people to contribute to the renovation of our national economy through increase of honest savings.

(15) All things considered, the fact that our national finance, important enterprises, the household economy of the people are alike suffering from some deficit, leads to the following conclusions: First—the stock of materials is fast running low. Second—repairs and replacements which must be regularly done in order to maintain the national economy in a sound condition are left undone, and the situation is growing from bad to worse. Third—national debt to foreign countries is steadily increasing.

A situation like this can not be allowed to last indefinitely, because it will endanger the national economy as a whole by diminishing the scale of production day by day.

(16) What does it mean concretely that the scale of production is becoming smaller? In principle, factors of production consist of land, capital equipment (such as machines, factories and buildings), and labor manpower. For making these elements contribute to production, their waste must be made up for and their breakdown repaired constantly. The following examples typically show how our country has recently failed to carry this out thoroughly.

(a) Deterioration of land resources: As regards the forest which is among the more important natural resources of our country, deforestation has not been followed by proper afforestation. Last year the acreage of only about 70,000 "chobu" was afforested, while the annual average during 1939 to 1941 reached 490,000 "chobu." The example shows how the land is deteriorating. To give another instance. Owing to melting snow and heavy rainfall occurring in the districts of Hokkaido, Northeast, and Hokuriku in the middle of april this year, damage amounted to Y1,037,000,000. It is usual that the typhoon in summer causes floods, but it is rare that spring snow meltings cause such flood damage. This can be attributed to the insufficient repairs of river banks due to the shortage of materials and funds. This inundation carried away 215,000 "koku" rice and 43,000 "koku" wheat, teaching us the lesson that negligence of keeping up the land will accelerate damage in the future.

(b) Superannuation of enterprise equipment: There are many examples, but we will here enumerate typical ones. Firstly, in 1936, one year before the Sino-Japanese Incident, there were 3.87 cases of break-

down of the government railway's rolling-stock per million train kilometers. In 1941, the coefficient jumped to 16.41 and in 1946 increased enormously to 101.9. Secondly, before the war it used to be the case that as regards the generating capacity of steam power plants, the authorized maximum capacity was nearly the same as the possible capacity. Recently the authorized maximum capacity has been 2,870,000 kilowatts, while the possible capacity is estimated to be about 1,090,000 kilowatts (or 1,400,000 kilowatts in case better quality coal is supplied). That means the latter is less than half of the former. The reason is, of course, that the equipment has deteriorated. The decay of equipment is a natural result of the past over-strained operations. Now it is high time to make over-all repairs or replacements. However, the rapid increase of expenditures on personnel in each enterprise hinders the carrying through of thorough repairing or replacement schemes on plant and equipment. According to reports made by nine principal electric companies, the percentages of personnel expenditure and depreciation expenditure to that of total expenditure were respectively 22.8% and 18.2% in 1944, but in the current year's budget, that percentage reached to 42.9 and 3.5 respectively, showing a far greater divergence between them.

(c) The deterioration of people's health: The physical deterioration of the people is shown in the reports on the physical condition of primary school pupils in towns and cities.

The reports compare the physical condition in 1937 with that in 1946 by sex. As a similar tendency can be seen both in cases of boys and girls, the figures for boys only are cited below:

Class	Height (in C.M.)		Weight (in K.G.)	
	(1937)	(1946)	(1937)	(1946)
1st year class	110.3	107.0	18.4	17.6
2nd " "	116.4	111.9	20.4	19.3
3rd " "	120.3	116.9	22.5	21.6
4th " "	125.5	121.0	24.7	23.3
5th " "	130.5	125.6	27.2	25.2
6th " "	134.7	129.9	29.8	27.5

A careful survey of the above table shows the fact that during these nine years, the growth of our school children was retarded nearly one year in both their height and weight. In other words, the physical standard of the present sixth-year class children corresponds to that of the fifth-year class children of nine years ago, that of the fifth is lowered to the level of the fourth, and so on.

(17) Shrinking production will affect the national economy not only in scaling down production, but in making its rehabilitation far more difficult. We often come across a case in which a Japanese proverb "1 inch amounts to 8 feet" should aptly be applicable. With immediate

attention, a repair of 1 inch is enough, while a negligence of one month or two months makes a repair of 8 feet inevitable. If we neglect treatment now, the loss in the future would become irrecoverable in the industrial sphere, just as immediate attendance will save a lot of trouble in matters of our health. We have experienced that many times.

The examples mentioned before only contribute to show us that such an ill omen has already begun to reveal itself in our national economy. And it also indicates that the policy which we are going to take has much to do with the future development of the national economy.

(18) In other words, what has been said in the foregoing lines means that our country at present can hardly produce all that is required for the reproduction of labor which, together with land, capital, equipment, and manpower constitutes the requisite of production. The lamentable decrease in the productive power of our country is minutely told by figures given under individual topics. In the field of manufacturing industries, the productivity per head is fluctuating between $\frac{1}{3}$ and $\frac{1}{2}$ that of pre-war days. The decrease in productivity per worker, however, can not be ascribed wholly to the worker. It may be attributed to various causes, such as damaged equipment, shortage of raw materials or fuels, or poorer management. The lamentably poor productivity at present originated in many such reasons as stated above. It must be clear to everybody that we shall effect a substantial renovation of our national economy simply through restoration of the productive power of each laborer to the level of pre-war days.

Meanwhile, by securing the right of living for working people, we mean positive participation by laborers in the formation of a structure by which honest workers may increase the fruit of their labor and thereby raise their standard of living.

(19) What is the system in which the increased fruits of labor flow to enrich the life of the working people? This is an important and fundamental problem, but we shall now consider only the immediate and concrete aspects. Let us take a roundabout but practical example. We begin with a given level of wages. The official price is revised and raised two- or three-fold. Then the wage level cannot but be raised for the reason that the given level cannot sustain living under the new price level. The official price consequently rises again. Since there will be no end to this circular movement, it is said that the wage level and price level must be determined simultaneously. There is no question as to the desirability of the simultaneous determination, but why does this circular movement occur? Why can we not actually escape it? Precisely because black-market profits which are several times the profits calculated in the official price schedule exist in the circulating process.

In our effort to contract these black-market profits and, if possible, to bring them to nothing, lies the only effective means to cut the said cir-

culatation and, also, the shortest cut to connect the fruit of labor directly with the substance of the life of the working people. So long as the portion of the people's wages robbed in the shape of black-market profits is left as it is, the unreasonable distribution of income will only be repeated, no matter how earnestly the wages may be revised to cope with the rising officially fixed prices. Herein lies the core of the problem facing the economy of this country at the present moment. Even from the long range point of view, it may be said that the formation of a structure where the fruit of labor immediately gives benefits to the working people, starts from the solution of these familiar but difficult problems as the first matter to be dealt with.

(20) Nothing perfectly correct can be expected of statistical figures, but the logic of economy cannot be cheated. Especially, the economy of a country essentially organic in structure must be grasped and diagnosed as an organic whole. The itemized explanation of this matter which is to follow has also been written from this standpoint, and, therefore, it requires to be real from the same standpoint....

Prices, Wages, and the Cost of Living ²

What Is Meant by the Price Level?

Lately we hear about "the sliding scale" in wages, which is devised to increase the wage as prices go up. The salient feature of this device is that the workers' concern does not lie in the nominal money wage but in the combination of real commodities needed for living which the wage can purchase. Every one in the nation has realized through personal experience that any increase in wage, be it 50 per cent or double, does not prove of any help if prices go up proportionately with it.

Thus we are confronted with the problem of how, in what manner, the price level should be determined. There is the official price level and the black-market price level. Various surveys are made and published in the press about the movements made by each of these two levels, and everyone has some idea about them. It is also clear that neither of them serves to show the unique level of the real prices of commodities. Especially under the present circumstances where there is a wide divergence between the official price and black-market price, neither of them will serve singly to measure the trend of the prices as a whole.

The "Effective Price"

How, then, should the real price level be determined, if we are to use a single figure? For this purpose, the following variables will be necessary:

² Sections 2: People's Livelihood, 4: Transportation, 5: Public Finance and Banking, 7: Foreign Trade, and Part III: Conclusion, have been omitted.

- (1) Official price
- (2) The quantity purchased at the official price
- (3) The price in the black market
- (4) The quantity purchased at the black-market price.

Instance is taken of the price of staple food (in rice equivalent in Tokyo). The comparison of the prices for a period of two weeks from January 27 to February 9 as against the period from April 7 to 20 shows:³

	A	B	C	D
January 27-February 9				
At official price	725	3.64	48	
At black-market price	557	27.40	277	
Total	1,282		325	13.90
April 7-April 20				
At official price	1,165	3.64	79	
At black-market price	445	36.20	299	
Total	1,610		378	8.54

A—Consumption (per-capita calorie per day). B—Unit Price (per kilo in yen). C—Amount of Consumption (per family in yen). D—Average Unit Price (per kilo in yen).

As seen from the above actual instance, the black-market price shows an increase of 32 per cent, while the actual average price shows a decrease of nearly 40 per cent. A similar instance took place in November last year when the official price of rice was suddenly raised by 90 per cent. According to the same statistics, a comparison of prices in Tokyo in two weeks in October as against those in two weeks in November, reveals that the actual price on the average went down from Y8.36 to Y6.24, while the official price nearly doubled. The fact that the purchases on the black-market decreased from over one-quarter to one-fifth of the total quantity purchased has acted largely on the circumstance. Let us call this average price "the effective price."

The Fluctuations of Effective Price

The indexes of official prices and of black-market prices have their own meaning respectively. However, the level we must compare with wages and the household economy is this effective price. Whether the effective price will rise or fall surely depends upon the fluctuations of official prices and black-market prices, but the quantity of officially rationed goods has a very powerful effect upon the effective price. Thus, if we make an index of the effective price of foodstuffs in Tokyo, using the materials obtained from the Consumer Price Survey, we find the fluctuations recorded as given below. (In the following index, the two-week period between July 1st and 14th of last year is used as the base.)

³ From Consumer Price Survey of the Cabinet Bureau of Statistics.

	<i>All Foods</i>	<i>Staple Foods</i>	<i>Other Foods</i>
July, 1946	102.0	100.0	103.7
Nov., 1946	80.9	46.1	104.1
Jan., 1947	124.4	75.3	155.4
Feb., 1947	130.2	84.0	162.0
March, 1947	140.5	95.2	170.8
April, 1947	129.5	75.8	162.8

Here, each month denotes a four-week period: thus, July (July 1-28); November (October 21-November 17); January 1947 (January 13-February 9); February (February 10-March 9); March (March 10-April 6); April (April 7-May 4).

As nearly 70 per cent of the living expenses is paid for foodstuffs, the index of these goods roughly indicates the fluctuation of living expenses as a whole. Although we do not have figures any more recent than May of this year, these statistics clearly show that the effective price of staple foods has gradually fallen since July of last year to less than one-half during the season for movements of new rice in November (in spite of the nearly doubled rise in the official price of rice), but that from this time on it has begun to rise again, though not so much that it attained the level of July of last year. Taking into consideration all foodstuffs, the prices in April of this year advanced by 30 per cent against those of July of last year. It is quite conceivable that they have made a fairly sudden rise more recently; but the statistics which have been cited tell us eloquently above anything else how such phenomena as the appearance of new rice and the release of imported foods in large quantities and the increased distribution made through the regular routes have served to reduce the effective price.

Comparison with the Pre-war Price Level

We have so far explained only the recent price movements. How many times has the recent price level risen, compared with the pre-war period? Since the black-market price shows an abnormal rise, it is almost impossible to estimate statistically how many times the recent effective price has risen compared with the pre-war period. If we take up only the official price, the wholesale price of May of this year was 21.5 times that of June 1937, and the retail price 27.9 times that of June 1937. The rising rate of fees such as railway freight and subscription prices of newspapers was 8 times those of September 1939, showing a much more moderate rise.

As is obvious, it is impossible to estimate the increase in the cost of living in comparison with that of the pre-war period only from statistical data of official prices. We have to change our method in order to estimate the rate of increase of the cost of living. We may first estimate the quantities of living necessities that may be consumed by an average Japanese citizen under the current deficit circumstances, which will,

more or less, represent the real consumption today. Dividing these quantities into two parts, namely, quantities rationed through the legitimate channel, and those purchased through black markets, the value of the former will be calculated by multiplying black-market prices, supposing these quantities will be supplied from the black markets. Adding up these two amounts, we can guess how much is paid for the combination of consumers' goods assumed.

Then we calculate the cost of household goods of the same quantities as mentioned above at the price level in 1937. The proportion of these two sums roughly shows the rate of increase of the cost of living during the past ten years.

It is very difficult to get the accurate figure, as the cost of quantities to be purchased through the black market is elastic because of the difficulty of fixing the average quantities of consumers' goods to be consumed. The rate in June 1947, however, indicates roughly an increase of 60 to 70 times during these ten years.

Fluctuation of Wages

The typical figures to show how wages have risen compared with the rise in the cost of living can be seen in the following table of daily wages:

	1937 Average	April 1947	Multiple
Underground miner	Y2.20	Y81.59	37
Manufacturing worker (male)	2.48	57.80	23

Even in the case of miners who have received the most favored rate of increase, it cannot keep pace with the rise in the living cost of late. However, the present wages are different from those in the past, and it is difficult to compare the existing ones with the standard in the past, because special rations are given according to the degree of heavy labor at present and payment is often made in kind or in the form of subsidies for employees' co-operative associations.

But it should be admitted in any case that the rise in the wages has been lagging compared with the actual advances in commodity prices.

Relations Between Commodity Prices, Wages, and Family Expenditures

The working classes, especially those living in urban communities, have considerable interest in the commodity prices and wages as having direct bearing on their family budget. It may be superfluous to show the condition of family expenditures by government statistics, for it is something every individual is well versed in. Just as with every sort of statistics, it is hardly possible to show by the mere assortment of figures

the struggle of balancing our family budget and the particular individual circumstances pertaining to this question. But the people may take the average figures given here as a yardstick with which they may compare their own.

Analysis of Family Incomes

Comment on the deficit in family budgets will not be made here, for it has been roughly stated in the Overall Analysis above. Here we shall first see the analysis of the average family incomes. The following are the average figures (for an average family with 4.46 members) for February investigated by the Price Board of working people in Tokyo:

	<i>Amount Yen</i>	<i>Percentage</i>
Earned Incomes:		
Basic pay	534.62	19.4
Allowances	1,246.78	45.2
Incomes from side-jobs	229.84	8.3
Incomes from domestic garden vegetables	5.90	0.2
Total	(2,017.14)	(73.1)
Other incomes:		
Incomes on property	3.69	0.1
Pensions, insurance	...	...
Total	(3.69)	(0.1)
Others:		
Withdrawals of savings deposits	149.65	5.4
Proceeds of property sold	215.34	7.8
Gifts received	239.35	8.7
Loans	106.84	3.9
Others	24.17	0.9
Total	(735.35)	(26.7)
General total	2,756.18	100.0

In February the pay in cash was limited to Y 1,816.86; the pay in cash was Y1,041.84 and the tax deduction etc. was Y269.88. The withdrawal from the frozen deposits was Y505.14. This sum of about five hundred yen seems to have been withdrawn as "living expenses." The "withdrawal of savings deposits" mentioned in the above table is outside the withdrawal of about five hundred yen referred to above.

The earned incomes including such incomes as from the domestic garden vegetables represent about 70 per cent of the total income, as will be observed above. The withdrawals from savings deposits, proceeds of property sold, and loans, which are indicative of "takenoko" life, amount to about 17 per cent, as against 12 per cent in October of last year, a fact which shows that the family budget has become more and more difficult to balance.

Analysis of Household Expenses

Now, let us see the household expenses. There are various results of research along this line. Here, we take up Consumer Price Survey by

the Cabinet Bureau of Statistics which is deemed to be made up by the best scientific methods. The following shows the fluctuation of household expenses in Tokyo in the period of first quarter of this month in comparison with July of last year:

<i>Expenditures</i>	<i>July</i> (1946)	<i>January</i> (1947)	<i>February</i> (1947)	<i>March</i> (1947)	<i>April</i> (1947)
Total Expenses	2,019	2,640	2,930	3,431	3,661
Total food	1,477	1,845	2,097	2,363	2,425
staple food	638	513	672	798	785
Clothing	151	210	210	295	352
Light and fuel	46	136	159	172	134
Housing	78	99	102	147	174
Others	267	350	362	454	576
Food percentage to total	73.2%	69.9%	71.6%	68.9%	66.3%

Months above mean 4-week-periods respectively shown as follows: July (1946) from July 1st to July 28th; January (1947) from December 30th to January 28th; February (1947) from January 27th to February 23rd; March (1947) from February 24th to March 23rd; April (1947) from March 24th to April 20th.

The statistics above show the typical and average household expenses in Tokyo. Accordingly they are generally higher than workers' household expenses. Yet percentage of food expenses in the total household expenses is between 66% and 73%. This shows clearly how strained the household budget is for everybody.

Analysis of Staple Food Purchase

Let us look further into the household expenditure. The greater part of it is spent in purchasing staple food both at official prices and black-market prices and shown below:

	(A)	(B)	(C)
Jan.	22.8%	Y361	70.3%
Feb.	35.4	537	80.1
Mar.	41.3	672	84.5
Apr.	31.3	622	79.6

(A) % of black-market purchase in total volume. (B) Value of same. (C) % of black-market expenditure of total. Each month indicates the same period as in the foregoing table.

In short, from 20 to 40% of the total quantity is purchased at black-market prices, while something between 70% and 83% of total expenditure is spent for that purpose. If 10% of the black-market food could be purchased at official prices, without changing the total quantity, we could save as much as 23.2% of total expenditure in the case of April referred to above. This clearly shows the magnitude of significance which the increase of rations through legitimate channels will have upon the household expenditures of people.

Production

Trend of Mining and Industry

Our production activities in industry, which had been shrinking drastically since the spring of 1944, virtually ceased with the termination of war in August 1945. Immediately after the war, the production rate deteriorated to less than 10 per cent of the total production in 1935-37, but it gradually recovered with an awakening out of the state of confusion. In September 1946, it got back to 30.4 per cent. Since then, however, it came to a standstill, showing 29.4 per cent in October, 38.8 per cent in November, 27.7 per cent in December, 1946. As this year commenced it gradually began to decline again, showing 25.4 per cent in January and 24.8 per cent in February. In March, it temporarily improved to 30.8 per cent through a slightly increased supply of power and coal, but dropped again to 30.0 per cent in April.

The following may be regarded as the causes of this decline:

Firstly, the largest responsibility of under-production lies in the shortage of materials, coal, and power, and not in the lack of equipment nor in that of labor. The potential productive power of existing equipment is showing a fairly big surplus against actual production. This is shown, on the one hand, by the decline in production of the industry of basic materials, and on the other by the operation of manufacturing industry based highly on stock materials. . . .

It is unfortunately true that we always feel keenly enough the shortage of food, but not so much that of iron or cement. We must be all aware of the fact that the former will be responsible for an immediate famine, but the latter for the continued famine for ten or twenty years ahead. The shortage of iron and cement, as we have elaborated before, will cause wide-scale damage to the manufacturing or railway establishments, the devastation of land, and floods or other kinds of disaster, thus lowering the national productive capacity as a whole for many years to come.

Such production as has relied on stocks of materials shows the recovery made after the end of the war. Especially in machine industry, a marked recovery was witnessed, showing a 50 per cent recovery of the pre-war level last autumn. This is never a healthy situation, for machine industry which consumes iron and steel which can only be provided by the iron and steel industry, should not prosper alone. This merely shows that the increase in production has been expedited by stocks of materials and that production will diminish with the drain on stock.

If such precious stocks as iron, steel and rubber had been directed to coal mining, railways, or other basic industries, instead of being poured into the manufacturing of rather unimportant consumption

goods, they would have done a lot toward enlarging production in general.

For two years after the end of the war, the above-mentioned measures could not be taken effectively. If there were stockpiles of materials, it would be possible to make use of them for the production of such basic materials as coal, iron, etc.; and gradually increase the production of other materials. As these stockpiles have been almost exhausted now, it is increasingly difficult to achieve the rehabilitation of production only through self-help, and it will be necessary to depend on outside help.

As the second important cause of inactive production, the increasing inflationary tendency must be taken into consideration. Inflation disturbs stability of prices and wages, makes it impossible for enterprise to foresee future prospects, or gives rise to labor unrest and impairs normal production activities. Labor, capital, and materials will be all diverted from production of basic materials essential for the economic reconstruction to commercial activities or the production of consumer's and luxury goods which are quick in bringing in profits. Precious materials will be thus wasted, resulting in making the fundamental economic reconstruction more and more difficult.

It is, therefore, imperative to stop the advance of inflationary tendencies and stabilize prices and wages.

The fact that the final decision has not yet been made about reparation plants, is having also negative effect on the reopening of production. Factories designated on the basis of the interim reparation program drawn up by the Far Eastern Commission range over various fields such as Army and Navy factories, airplanes, ball-bearing, machine tools, iron, shipbuilding, thermal power plants, sulphuric acid, soda, synthetic petroleum and private munition factories, etc., totalling about 1,000 plants so far. Under the present economic situation of short supply of both materials and power, the designation of reparation factories does not necessarily cause a fall in production, but the fact that it is not yet clear which factories are finally to be retained is damping the ardor for production.

Shortage of Power

What is the situation on coal and electric power, important bases for the restoration of production? Attention has already been called to the fact that the greatest cause of the present slump in production in our country lies in the short supply of materials and power. When the supply of coal and electric power becomes abundant, the condition of domestic production will be improved and the import of materials in short supply will be easier.

At the time of the termination of the war, it was expected that the electric power supply would become extremely excessive as a result of the disappearance of war industries. In fact, the demand for electric power fell to 990 million KWH or only 43 per cent of the average of 1935-37 in September 1945. Since then, the demand has rapidly increased, in consequence of the production recovery of mining and industry and increased consumption for cooking and heating, and rose above the pre-war level in March of last year. Then unprecedented shortage of electric power was experienced during the turn of the year 1946-47, owing to the fact that capacity of hydroelectric power plants was decreased by lack of water, and capacity of thermal plants to make up for it was fully used on account of the shortage of coal and deterioration of facilities and equipment. In western Japan, in particular, which largely depends on thermal plants, restriction on use of electric power came to be counted as the greatest obstacle for production. Since April, when water begins to be abundant, capacity of hydroelectric power plants has been increased and the electric power crisis has become temporarily less acute. In western Japan, however, strict restriction is continued. If things continue to be as they are now, shortage of electric power in the dry season next year will be worse than that experienced in that of this year, paralyzing the whole industry. In order to forestall such a situation, it will be necessary from now on to make efforts to repair thermal power plants, and to increase the stocks of coal on the side of supply; to make all necessary preparations for restraining the non-essential use and securing the supply to essential users on the side of demand of electricity.

As for coal, the production of coal drastically fell off since the end of the war: in November 1945, it fell to 554,000 tons, or 16 per cent of the average of 1935-37.

Since then coal production gradually increased, rising to 1,700,000 tons in May 1946 and to 2,000,000 tons in November 1946. Since that time, however, production has not been very much increased, reaching 2,170,000 tons in December 1946, 2,010,000 tons in January of this year, 2,030,000 tons in February, 2,250,000 tons in March, 2,080,000 tons in April, and 2,100,000 tons in May. Greater effort will be required to reach the production level of 2,500,000 tons per month or 30,000,000 tons per year.

The actual output of coal in 1946 was 22,310,000 tons and it fell short of the goal of 23,000,000 tons set at the beginning of the year and further short of the revised goal inclusive of the special production increase program of 24,000,000 tons. Since last year, the government has often made decisions for emergency coal production increases, but no visible improvement has been achieved. This has proved that it is im-

possible to achieve a rapid increase in coal production by sporadic or superficial measures.

With regard to the coal production, it must be noted that the deterioration of quality should not be disregarded while too much emphasis is laid on the achievement of the quantitative goal. The supply of coal with inferior calorific value means as great a waste as the supply of inferior quality of food. For example, the government railway consumed 4 million tons of coal or 8 per cent of the total consumption in our country in 1936. Last year, while the mileage covered by trains is almost the same, it consumed 6,960,000 tons or 30 per cent of the total consumption. This increase of coal consumption was partly due to decreased skill of drivers, deterioration of equipment, etc., but mainly accounted for by a deterioration of the quality of coal. We must take care not to make the coal production increase result in the production increase of stone and earth. On the side of coal consumption, attention must be called to the fact that, as such little coal as is available is equally distributed to many factories, operation efficiency of all factories is curtailed, and more coal is required than before to produce the same quantity of manufactured goods, which in turn accelerates the coal shortage.

Specific attention is also invited to the following fact as regards the connection between coal production and industrial production. The purposes for which the coal is consumed can be classified into two categories, namely non-industrial such as railways, bunker, heating, gas and coke, thermal and industrial plants such as steel and iron, machinery, spinning and ceramics. The requirements of the former category cannot be reduced any more than the minimum required for the maintenance of the economy, just as the food requirement for survival of a man cannot be cut down below a certain degree. With insufficient supply of coal, the greater part of the total must be apportioned to the non-industrial requirement and the allotment to the other category is extremely limited. In other words, the slightest increase in the current coal production will give comparatively big effect on the increased mining and industrial production. Figuratively illustrated, a 20 per cent increase in coal output means a 40 per cent increase in industrial production. The increased industrial production makes it possible to supply the mines with more materials and machinery required for further expansion of coal production. Thus every production increase stimulates another production increase. The contradictory problems involved in Japanese economy will thus find their solution in increased coal production.

Situation of Agricultural Production

In staple foods, acreage under rice and wheat has been decreased as compared with that in pre-war days. The production of rice and

wheat, which had shown respectively 67,050,000 koku and 23,250,000 koku in the average return between 1937 and 1939 turned out 61,380,000 koku and 11,580,000 koku in 1946. Curtailed acreage and underproduction of both rice and wheat—two main staple foods—have been chiefly responsible for the present plight. On the contrary the production of potatoes has been greatly increased: sweet potato production in 1946 reached 1,470,000,000 kan, or a 150 per cent increase over the average production between 1937 and 1939, by way of the increase both in acreage and production.

As for per tan production, there has occurred practically no change in paddy field production, but a conspicuous decrease in barley and wheat. Barley and wheat in 1946 respectively showed only 1.03 koku and 0.70 koku as compared with the average production of 2.01 koku and 1.41 koku between 1937 and 1939. These figures only tell us that the productive power of land or agricultural productivity has definitely been decreasing. This has been caused by various reasons as follows:

Emphasis had been placed during the war on the cultivation of rice, wheat and potatoes in preference to others; the cultivation of fertilizer greens has been decreased; the lack of feeding has caused difficulty in the raising of live-stock, inviting a sharp decline in production of self-supplied fertilizer. It may be said that these causes have jointly disturbed the normal or rational circulation within agricultural management, detrimental to the conservation of land productivity. To make the matter worse, production equipment in agriculture as well as in industry has long been badly in need of repair or replenishment, which is unavailable under these circumstances. Thus the land has been losing its productive power.

The comparison between the figures of 1946 and those of 1937 shows the following decline: in nitrate fertilizer, 920,000 tons as against 1,900,000 tons, in phosphate fertilizer, 400,000 tons as against 1,920,000 tons, and in potassium fertilizer, 110,000 tons as against 250,000 tons. As regards agricultural implements, the situation is still more aggravated and only 20 to 30 per cent of supplies in and around 1940 are available.

As the food situation grew worse, a conspicuous decrease was shown in the number of cattle, because feed was turned to human consumption; suspension of imports of feed also contributed to the deterioration. In 1946 oxen and cows for labor decreased to 1,830,000, milking kine to 160,000, horses to 1,070,000, pigs to 90,000 and poultry to 20,400,000, or, as compared with the averaged top figures in the past, a decrease of 91 per cent was shown in the number of hogs, of 62 per cent in that of poultry, of 15 per cent in that of oxen and cows, of 30 per cent in that of horses and 38 per cent in that of milking kine.

On the other hand, a great number of demobilized or repatriated persons joined the rural communities, and consequently the per-family

area of tillable land diminished from 1 chobu (2.45 acres) to 8.7 tan (2.0815 acres), causing a shrinkage in the scope of the management. The situation being as above, we have to admit that the actual phases of agricultural production have yet to face many difficulties. Still, agriculture is placed comparatively under a favorable condition as compared with manufacturing industries. In other words, the direct blows of the war such as air-raids, and other adverse circumstances hit agriculture comparatively little. In pre-war Japan, one-half of the population was engaged in agriculture and the other half in other industries. Later, a production in value nearly twice as high as that in agriculture was accomplished by those engaged in mining and other industries whose number hardly reached one-half of those engaged in agriculture. After the war, the production in mining and other industries slacked down to one-third of that of the pre-war days, whereas the agriculture production maintained an 80 per cent level. Consequently the comparative position of agriculture in Japan's economy has greatly advanced in importance. Agriculture will eventually contribute to a large extent to the restoration of our economy; if we can increase the production through stabilizing conditions for farmers' lives by means of the land reform.

Labor and Employment

Increase of Population

The total number of repatriates including demobilized soldiers was 5,360,000 up to the end of May 1947. (Investigation of the Repatriation Board, Welfare Ministry.) The total number of the Japanese in Japan as of October 1, 1947, is estimated to be 77,850,000 (estimate by the Economic Stabilization Board). The present population in the Japanese Islands is 12 per cent higher, compared with the population of 69,250,000 in 1935. As the percentage of workable people among the repatriates is high, the increase of the population to be absorbed in various jobs is quite sizable.

Unemployment Situation

On the other hand, the production activity of the mining industry at present is about 30 per cent of the pre-war level, while agricultural population has reached the state of saturation. Approximately 10,000,000 unemployed people will be inevitable—even if productivity recovers to the pre-war level.

The number of unemployed after the war is not so large as had been feared. According to last year's investigation by the Welfare Ministry of people seeking employment, only 210,000 persons were seeking jobs among the completely unemployed 400,000 who were the objects of the investigation.

In the employment agencies, the number of people seeking employment is usually smaller than that of people seeking workers. During one year since May 1946, the percentage of the people seeking employees to that of people asking for employment was around 68%.

Judging from the census on April 26, 1946, the number of the completely unemployed (that is, who are able to work and willing to work but held no jobs) was only 1,590,000 and the number of people who worked for one week or less a month was 1,960,000 and the number of people working between 8 days to less than 20 days a month numbered 4,320,000. This state of affairs should be called the latency of unemployment. It is due to the fact that, under the inflation, if economic control is imperfect, one can earn one's bread without working in constant jobs, or such person can often make a livelihood more favorably than a constant employee. Under the inflation, in other words, unemployment can not be recognized as genuine unemployment. Therefore such unhealthy phenomenon occurs as the fact that supply of labor is short in fields essential to the national economy and abundant in economically unnecessary enterprises. The result is that the inactivity of production will be accelerated and economic recovery will consequently be delayed, because laborers shun the hard productive jobs and concentrate on easy or merchant-like jobs.

Employment Situation

The employment figure which showed a marked decrease immediately after the war, has indicated a steady recovery, gaining each month until the end of last year. According to the yearly employment-research made by the Cabinet Bureau of Statistics the total figure of employment at the end of the year before last was 3,870,000 in mining and manufacturing industries, total industrial employment being 7,570,000, while these figures rose to approximately 6,000,000 and 10,000,000 respectively in July of last year, attaining as high a level as in pre-war days.

The mining and manufacturing production, however, remains as low as 30 per cent of the pre-war level. Thus the productive power per capita is about one-third of what it was before the war. In other words, the situation of excessive employment exists.

The employment which had continued its upward trend until the end of last year, stopped rising from the beginning of this year, with the exception of coal mining. This is partly due to the production stalemate in manufacturing industry caused by the drained raw materials and to the shortage of power and coal since last January. But more basic than this is the fact that the unbalanced situations attendant upon the post-war economy in Japan have put pressure upon the management of those non-essential industries which have lost their elasticity, and have driven

them to face the immediate probability of operation curtailment, production stoppage and disposition of excessive labor.

Productivity of Labor

As mentioned above, average productivity per laborer at present in Japan is $\frac{1}{3}$ or less that of pre-war days. Unbalance between employment and productivity were generally noticed after the war in many industries in Japan, and such situation still persists without showing any sign of improvement. For instance, the following are the figures showing this trend in the fields of coal mining, cement industries and the Government Railways:

(1) Average monthly output of coal per miner: (in tons)

1933	18.9
1936	17.5
1941	13.9
1945	5.9
1946	5.4
Jan. 1947	5.5
Feb. 1947	5.5
Mar. 1947	6.0
Apr. 1947	5.4
May 1947	5.3

(2) Average, monthly production of cement per worker of the industry: (in tons)

1945	25
1946	14

(3) Number of government railway employees: Train operation kilometers in 1936 and in 1946 are about the same but the number of employees in 1946 was 573,000 against 228,000 in 1936. This is about $2\frac{1}{2}$ times the number of employees in 1936.

By what reasons have such circumstances as above mentioned been brought about? Generally speaking, want of foodstuffs, traffic congestion, lack of dwellings, deterioration of equipment, operation curtailment, difficulties in securing materials and power, poor quality of material and superannuation of equipment may be cited as the main reasons. Furthermore, laxity of labor discipline and insufficient technical training can also be considered among the reasons.

Special Rations of Food and Necessities to Workers

In order to attain a higher output by workers who are mostly responsible for increasing production, special rations of rice over the standard ration and of necessities for workers are being distributed on a priority basis out of extremely restricted national resources. But it

cannot be said that the matter thus far has been planned and dealt with very successfully. Preferential and well co-ordinated steps are being specifically taken for rations to coal miners who play a leading role in increasing production. However, there are still certain cases where the actual results fall short of the aims. We will briefly describe the quantity of each article actually delivered last year and the rationing programs decided upon in March of this year for securing articles for the use of miners.

(1) Actual delivery of each article to workers (including articles rationed for shipment of agricultural products etc.):

Alcoholic beverage—505,000 koku
Cigarettes—1.3 billion pieces
Work clothes—16 million pieces
Towels—12 million pieces
Working gloves—9.40 million pairs
Rubber-sole tabi—7.90 million pairs
Rubber boots—0.25 million pairs

Besides the above, soap, soy sauce, and sweets were delivered in some quantities.

(2) Programs for securing articles for the use of miners:

(a) As for staple foodstuffs: 6 go for a worker, 3 go for each member of his family per day (excluding surface workers) and 1 go for each worker per day as between-meal food (including surface workers). Besides, miso, soy sauce, salt, vegetable, fish and shell fish, etc. will be rationed securing more than twice as much as the general rationing rates.

(b) As for fancy foods: 1 go of sake per day (including the ordinary ration) will be given to underground workers in accordance with their actual working days and 5 go per month to surface workers. 50 cigarettes per capita per month will be given as an additional rationing both to underground and surface workers when the output actually produced exceeds the scheduled quantity. Sweets, 100 momme per capita per month will be supplied to juvenile miners and women workers instead of sake and cigarettes.

(c) Articles for work and for daily use: Work clothes, gloves, rubber-sole tabi, gaiters are articles indispensable for work. Necessary quantities, for instance, 1.5 work clothes, 8 rubber-sole tabi and 3 pieces of towel will be maintained. As a particular requirement mainly in Hokkaido in winter, rubber boots and rubber miner's boots are available to supply a yearly total quantity of 120,000 and 70,000 pairs respectively.

Norway : Diagnosis, Prognosis, and Program

Introduction

FOLLOWING a budget for 1946, which included forecasts for 1946 and 1946-50, the Norwegian government presented a budget for 1947, which went beyond the 1946 budget by enumerating the goals to be reached through the Government's economic policy.

In private enterprises, the reason why budget estimates are set up is to obtain a better general view, steady management and control, and closer collaboration between the departments. The position is somewhat similar in the case of a nation. The national budget will serve as a guide for the government and its agencies.

A national budget should be based on three alternative principles, viz. :

- (1) Descriptive analysis of individual plans (Diagnosis)
- (2) Hypothetical forecasting of future developments (Prognosis)
- (3) International planning (Program).

The government prepared a budget for manpower, foreign exchange, and materials, all of which were in short supply. Included also were budgets for consumption, investment (private and public), production, and public activities. Should international economic conditions deteriorate, a special budget held in reserve would be uncovered.

In matters of policy, the government was prepared to use all necessary controls in order to favor investment against consumption. In pre-

paring the plans, the planners assumed cost of living, prices, and tax system of late 1946. Should prices, taxes, or wages deviate from their levels at the end of 1946, their assumed levels for 1947, or should productivity not attain the assumed level, or foreign deliveries not equal amounts anticipated, adjustments would have to be made. As might be expected, all the budgets are interrelated. In order to favor investment, for example, it will be necessary to allocate foreign exchange, imports, manpower, and commodities in a manner to encourage the output of capital goods.

Purpose and Method ¹

The first attempt to set up a Norwegian national budget was completed in February 1946 and presented to Parliament as Exhibit 11 to the Fiscal Budget for 1945-46. In this statement several forecasts were made for 1946 as well as for the five-year period 1946-50, each of which presupposed a different set of conditions. Their main purpose was to point out certain economic relationships and problems of particular importance to economic policy during the period of reconstruction. The national budget for 1947 goes beyond this. It indicates the goals which the government will endeavour to reach through its economic policy.

In private enterprises budget estimates are set up to obtain a better general view, steady management and control, and closer collaboration between departments. Somewhat the same purposes underlie national budget-making, as the national budget serves as a guide for the government and its agencies.

Collaboration between various branches of the administration will be promoted through the budgets. Each branch will have to adjust its special budget to the whole plan, and lack of co-operation in any particular section is discovered fairly readily. By adopting a method of decentralization in setting up the national budget the best possible use of specialized knowledge can be made without obstructing the general view. By improving the understanding of the way various parts of the national economy are interrelated and linked with one another the national budget carries a message to government agencies, municipalities, and private enterprises, as well as to individual consumers. When available resources and plans for their utilization are shown in figures and tables it will become more apparent how necessary it is for all these bodies and persons to work together in order to ensure co-ordination of economic activities and economic policy.

A general view of the national economy is more necessary today

¹ *The Norwegian National Budget for 1947*, summary of "St.meld.nr.10.(1947) Om nasjonalbudsjettet 1947," prepared by the Royal Norwegian Ministry of Finance.

than ever before. The government, municipalities and individual enterprises are all setting up plans which, added together, imply the use of materials, manpower, and foreign exchange to a much greater extent than resources permit. This excess of requirements over resources will, by necessity, have some of the requirements unsupplied. Left to chance, essential requirements are sure to remain unfilled, whereas less essential projects would be embarked upon and their realization retarded owing to the bottlenecks which would inevitably ensue. Through the setting up of budgets for imports, exports, production, investment, etc., it becomes much easier to adjust demand to supply and to ensure the best possible solution of the problems of priority. Thus, the budget for 1947 deals with a situation where the main problems are those of scarcity. Under other circumstances the objective of the budget might have been to show to what extent it would be desirable and possible to increase employment and make use of idle resources.

National *accounts* are in reality merely a consolidation of the accounts of the individuals and groups of individuals of which the community is composed. Similarly the national *budget* can be computed from all the individual "budgets" or intentions with regard to future activities. As an example, the investment budget of industry may be worked out on the basis of returns from industrial enterprises showing the real investments they intend to undertake during the budgetary period. Likewise, the investment budget of agriculture will show the total projected investments of all farm holdings; the consumers' budget will show the total consumption contemplated by the individual citizens; the import budget represents the sum total of the individual plans for imports, and the export budget the sum total of the plans for exports, etc.

As a rule, a national budget which is set up as a collection of such individual *projects* will not balance. Thus, the plans for consumption, investments, and exports of goods and services may total more, or less, than the sum of the national products and imports, whereas, in the *accounts* that can be set up at the end of the period, the items on either side must, of course, necessarily balance. Similarly, the supply of labour will seldom be equal to the contemplated demand for manpower. In other words, the budget will not indicate the probable course of events, but only the strength and direction of prevailing *tendencies*. However, as a means of ascertaining such tendencies a budget based on a collection of individual plans may be useful.

For mere forecasting purposes, the "Prognosis" principle should be adopted. A budget based on this principle must stand on two legs: first, an analysis of the individual plans, and of the way individuals and groups of individuals will act under different conditions; and secondly, an estimate of the manner in which the external conditions to which individuals must adapt themselves are likely to develop. It will then be

possible to solve the forecasting problem theoretically by methods similar to those used for the solution of mathematical equations. The national budget thus will become a balanced accounting system of anticipated items.

If, however, the government not only wishes to forecast a certain development, but at the same time through economic policy tries to reach definite goals which are being incorporated in the budgets, the program principle is used. The underlying idea is to influence plans and actions of individuals and groups of individuals in ways which promote the ends.

The national budget for 1947 has, as far as possible, been set up as a program of economic policy.

Economic Policy

During the reconstruction period the principal aim of economic policy must be to restore the productive capacity of the country to its pre-war level as quickly as possible. This implies more than copying the past. We must attempt to remove some of the structural weaknesses which existed before the war. Moreover, we must endeavour to solve the new problems which will arise due to the fact that in the years to come we cannot, as we did in the 1930's, count on any considerable increase in the working population. The stagnation or retrogression of available manpower must be balanced by an increase in the productivity of the individual worker.

The increase in production which is expected in 1947 will be directed mainly to reconstruction and investments. Private and public consumption should not exceed the 1946 level to any considerable extent.

In influencing the use of means of production, first preference must be given to essential production. Similarly, the allocation of foreign exchange must give preference to certain important goods and articles. These principles apply, e.g., to the production of export goods and the raw materials needed to produce them, and to the procurement of ships, the expansion of power stations, housing, as well as to the production of all other goods needed for the restoration of our productive equipment.

The National Budget for 1947

The national budget for 1947 has been set up on the assumption that no recession will occur internationally during the year. It is assumed that the cost of living will be maintained at a stable level, and that there will be no serious labour disputes. It is further assumed that the price controls will be maintained. The same applies to most of the physical

controls, such as control of imports, exports, building materials, raw materials, etc. Other conditions are that the rate of interest remain low, and that the policy of taxation adhere to the principles laid down in the proposed fiscal budget for 1947-48. In order to be prepared for the economic problems if an international recession should occur in 1947 or in the first part of 1948, a reserve budget which may be put into operation on short notice is being elaborated.

Each of the individual budgets of which the national budget is composed, has been worked out in accordance with the principles adopted by the Cabinet Committee with regard to the economic policy to be pursued during 1947. In this way the national budget has become an illustration in figures and tables of the objectives which it is hoped to realize by these principles.

The national budget can be subdivided into a series of special budgets. The budget for 1947 deals particularly with the following types of separate budgets:

- (1) Manpower budget
- (2) Commodity budget
- (3) Budget for the trading of goods and services with foreign countries
- (4) Foreign exchange budget
- (5) Budget of production
- (6) Budget of consumption
- (7) Investment budget
- (8) Budget of public activities

The separate budgets Nos. 1, 2, and 4 include the main factors that will be in short supply in the immediate future, viz., manpower, the principal scarce articles, and foreign exchange. For each of these scarcity factors a budget has been set up showing the estimated supply and proposed allocation. The budgets Nos. 3, 5, 6, 7, and 8 have been consolidated into a general budget which shows, on the one hand, the total supply of goods and services derived from home production and imports and, on the other hand, how the total supply will be utilized. All of these separate budgets are based on information available and conditions as they were about the turn of the year 1946-47. This also applies to state subsidies, duties, prices, and wages. In considering the figures this should be borne in mind, and such modifications should be made in the conclusions as follow from changes in the premises explained above.

Those items in the budget which are determined by previous decisions or events have had to be estimated on the basis of more or less reliable forecasts. So far as these items are concerned, the estimates must be regarded as assumptions on which the program has been worked out.

The manpower budget shows the available supply of labour and how

it is distributed between the various sectors of the economy. The total employment in 1947 is expected to increase by 12,600 persons or somewhat less than 1%, mainly as a result of an increase in the labour force.

Employment in forestry, whaling, shipping, and manufacturing industries is expected to increase from the summer of 1946 to the summer of 1947. During the same period a reduction is expected in agriculture, building and construction, inland transportation, and public administration. In the case of building and construction, the entire reduction will take place in the public sector of these activities, leaving the number of workers engaged in building and construction for private account on the same level as before.

In setting up the manpower budget it has been taken into account that the mobility of labour is limited, both geographically and occupationally.

Great importance is attached to measures designed to increase the efficiency of labour in all trades whether it is a question of expanding and improving the productive equipment, of rationalizing and mechanizing operations, or of providing a spur to greater efforts.

The commodity budget is concerned with the supply and disposal of particular goods, such as timber, bricks, cement, iron, steel, etc. The purpose of this budget is to ensure that the allocation of particular goods conforms with the supply and that the goods are distributed according to the accepted scale of priorities.

Commodity budgets have been prepared for a number of goods now in short supply. The most important budgets are those for lumber, bricks, and cement, i.e., the three main categories of materials for building and construction. The estimates are based on a total production of lumber of 330,000 standards in 1947, as compared with about 255,000 standards in 1946, and 180-260,000 standards before the war. The production of bricks has been estimated at 100,000,000 compared with 75,000,000 in 1946, and 90,000,000 before the war. The program for the cement industry is a total production of 450,000 tons in 1947, against 400,000 tons in 1946 and 350,000 tons before the war. A series of measures have been taken with a view to increasing the production of these materials as well as a number of other important building materials. The above figures are based on certain assumptions with regard to the effects of these measures.

With regard to the allocation of building materials one of the principles has been to increase the stock-in-trade in order to make it possible to carry out building more rationally. Another principle has been that housing should be accelerated and enjoy a better priority than most other building and construction works. Thus existing buildings and plants are to be utilized as far as possible even in cases where new buildings might have been desirable. Maintenance and repairs are to be

limited to what is strictly necessary. Next to these considerations the guiding principle has been to distribute building materials among the several trades in accordance with the policy which has been followed in elaborating the investment budget to which we shall revert presently.

The budget for the trading of goods and services with foreign countries is concerned with imports and exports of goods and services. The table below shows the import and the export program for 1947 as compared with the corresponding accounts for 1946:

IMPORTS AND EXPORTS OF GOODS AND SERVICES

<i>Imports:</i>	<i>1946</i> <i>mill. kr.</i>	<i>1947</i> <i>mill. kr.</i>
Import of goods according to foreign trade statistics (ships not included)	1,942	2,450
Imports for purposes of defence	160	170
Net imports of ships and major repairs (including floating factories etc.)	415	565
Operating expenses of whaling abroad	10	10
Operating expenses of shipping abroad	400	450
Expenditure for other services	100	100
Total	3,027	3,745
(Rounded)	(3,050)	3,750)
<i>Exports:</i>	<i>1946</i> <i>mill. kr.</i>	<i>1947</i> <i>mill. kr.</i>
Export of goods (ships not included)	1,164	1,500
Direct deliveries of whale oil	35	65
Gross earnings of shipping abroad	1,000	1,200
Other services	80	100
Total	2,279	2,865
(Rounded)	(2,300)	(2,850)

It will be observed that the total imports of goods and services in 1947 are estimated at 3,750,- mill. kroner as against 3,050,- mill. kroner in 1946 and that exports are expected to amount to 2,850 mill. kroner, compared to 2,300 mill. kroner the year before. Thus, the import surplus of goods and services will rise from about 750 mill. kroner in 1946 to about 900 mill. kroner in 1947. In this statement imports of ships and major shipping repairs abroad have been calculated at 565 mill. kroner and the foreign exchange earnings of shipping have also been taken into account.

The import program has been set up with a view of providing as much as possible of essential capital goods and other means of production. Imports of consumers' goods have on the whole been reduced slightly in comparison with 1946. With regard to that part of the import

which is included in the foreign trade statistics, capital goods have been estimated at 18.5% and imports of raw materials, building materials, and auxiliary materials, etc., at 68.5% of the total imports, as compared with 14% and 66%, respectively, in 1938. On the other hand, imports of consumers' goods have been reduced to 13% as against 30% in 1938. The principal import items of capital goods include imports of transportation equipment, machines, appliances, and other productive equipment. In these fields the import figures from 1946 have been doubled. Under the program for rebuilding the merchant and whaling fleet, deliveries of ships from abroad will increase considerably during 1947. The heavy imports of productive equipment and materials are felt justified by the prospects of increased productive capacity and an expansion of the export industries that will provide the country with increased foreign exchange earnings in the future.

Much attention will be paid to the possibilities of increasing exports, particularly against dollars, Swedish kroner, and other hard currencies. Exports of wood and paper products and fish and fish products are expected to yield a total of about 800 mill. kroner, which is 15-20% more than in 1946. Exports of whale oil are expected to amount to twice that of 1946, and a rise in exports is also anticipated in the case of metals, ores, and minerals.

The foreign exchange budget deals with Norway's international balance of payments classified by main currencies. This budget includes not only payments for goods and services, but also payments of interest, dividends, and capital transfers.

The net expenditures in 1947 on interest and dividends has been estimated at 50 mill. kroner. When this amount is added to the import surplus of goods and services in that year, one arrives at a total estimated current deficit on the balance of payments amounting to 950 mill. kroner, as compared with 800 mill. kroner in 1946. This deficit must be met by drawing on Norway's disposable foreign exchange reserves, which by the end of 1946 amounted to about 1,500 mill. kroner, and by raising credits abroad.

Besides having to meet the current deficit on the balance of payments, Norway must provide foreign exchange for the Norwegian quota to the International Monetary Fund for repayment of installments on our foreign loans and other debts, and finally for the payment of contractual installments on contracts for ships and machines under construction.

The production budget shows the total production of goods and services and how it is made up of contributions from various sections of trade. The aggregate net production of all sections of the economy is equal to the national product at market value. On the basis of the distribution of manpower and building materials set out in the manpower

budget and the budget of materials, and on the assumption that the efficiency of labour will improve in certain fields, a total national product of 8,600 mill. kroner is considered a reasonable target for 1947, as compared with 7,850 mill. kroner for the year of 1946, i.e., a rise of about 9.6%. Somewhat more than 300 mill. kroner of this increase is expected in manufacturing industries and in building and construction, 100 mill. kroner in trade and business, 88 mill. kroner in agriculture and forestry, and 86 mill. kroner in whaling. The expected increase during 1947 is partly due to an anticipated rise in the level of prices. In terms of quantity the national product is expected to increase by 6 per cent.

If this target is reached, the production of goods and services in 1947 will exceed the highest pre-war level. It does not follow that the standard of living will rise correspondingly, partly because the population has increased and partly because a large part of the production is utilized for restoring, improving and expanding capital equipment.

The budget of consumption deals with private as well as public consumption. Public consumption includes the current use of goods, labour and other services for public account which is not offset by an increase in the value of real capital in public ownership.

Private consumption, which at the end of the war had fallen to about 75% of the pre-war level, had already in 1946 recovered to a level of about 95% for the nation as a whole, and to about 91% when the increase in population is taken into account. As the satisfaction of the demands for consumption requires labour, materials, and foreign exchange which might otherwise have been used for the benefit of reconstruction and housing, the government has attempted to retard any further increase in consumption, especially of lesser essentials.

It is estimated that private consumption will amount to about 6,500 mill. kroner in 1947, compared with 6,200 mill. kroner in 1946, i.e., a rise of about 300 mill. kroner which is equal to 4.8%. However, these figures do not show the changes which have taken place in the quality and composition of the goods. According to the budget, the composition will be considerably more favourable to consumers in 1947 than in 1946. As an illustration, there will be comparatively more eggs, meat, pork, and other high-quality household goods, and the supply of shoes and boots will be considerably improved. The utility effect of private consumption will therefore be greater than indicated by the rise in figures from 1946 to 1947. But consumption will not, even in 1947, be as favourably composed as before the war, and the supply of clothes, shoes, and other private consumers' goods will remain below the pre-war level.

Public consumption has been estimated at about 1,000 mill. kroner in 1947, compared with 1,100 mill. kroner in 1946. Public consumption includes such items as wages and salaries, current consumption of goods and services, maintenance and repairs, etc. The reduction in the govern-

ment consumption is mainly due to the reduced costs of defence, and reduced expenditures in connection with the occupation and the liberation.

In the budget for 1947 the grand total of private and public consumption has been estimated at 7,500 mill. kroner, compared with 7,300 mill. kroner in 1946, which corresponds to an increase of 200 mill. kroner or 2.7%. Even when the rise in prices is taken into account, these figures indicate a total consumption somewhat above the pre-war level. Public consumption in the budget for 1947 is 13% of the total consumption, compared with about 15% in 1946 and about 10% just before the war. This increase since before the war is mainly due to the fact that the cost of defence is now a great deal higher.

The investment budget for 1947 greatly exceeds that of 1946. Private net capital formation has been estimated at 1,550 mill. kroner, against 1,000 mill. kroner in 1946. Public net capital formation is estimated at 450 mill. kroner in 1947, as compared with 300 mill. kroner in 1946, the increase of 150 mill. kroner being mainly due to the provision of armaments. Accordingly, the grand total of private and public real capital formation in 1947 is estimated at 2,000 mill. kroner, i.e., as much as 700 mill. kroner, or 54% more than in 1946. Only a small part of this increase is due to higher prices.

This increase in net capital formation will be achieved partly through increased imports of capital goods, especially ships, partly by increasing our domestic production of capital goods.

The composition of net investments by main classes of economic activities is shown in the following table:

BUDGET OF REAL INVESTMENT IN 1947

	mill. kroner	percentage
I. Agriculture and gardening	70	3.4
II. Forestry	5	0.2
III. Fisheries	30	1.5
IV. Whaling and other catching operations	80	3.9
V. a. Manufacturing industries, mining, and handicrafts	278	13.7
b. Electric power plants	130	6.4
VI. a. Shipping	470	23.5
b. Other means of communication	258	12.8
VII. Commerce (stock-in-trade)	90	4.5
VIII. Finance	0	0
IX. Hotel and catering	10	0.4
X. Housing	445	22.0
XI. Public administration (including defence)	125	6.2
XII. Miscellaneous services	30	1.5
Total	2,021	100

Among the investments in productive equipment, shipping and whaling occupy a strategic position, the total investments in these sectors amounting to 550 mill. kroner, or more than one-fourth of the total investments as compared with about 370 mill. kroner in 1946. The justification for these large investments is that reconstruction requirements are comparatively greater in this sector than in other sectors, and because these activities are essential to Norway's foreign exchange earnings.

In order of importance, manufacturing industries and electricity come next with a total of about 410 mill. kroner, corresponding to about one-fifth of the total investments. In 1946 the figure was about 250 mill. kroner. Here, the principal consideration has been to improve the equipment of machinery, appliances, etc., for which building materials are not required. Great importance is attached to investments designed to increase the production of export articles and of scarce goods needed for reconstruction. Particular attention has been paid to the districts devastated by the war. The supply of electricity will be increased, mainly for the benefit of productive enterprises.

The net investments in railways, tramways, motorcars, firelights, pilotage and harbour services, roads, postal services, telephones, telegraph, and wireless, add up to about 260 mill. kroner, corresponding to 12.8% of the aggregate investments, as compared with about 200 mill. kroner in 1946. In this field also the principal objective has been to provide the necessary equipment, while building and construction—except for reconstruction purposes—have been limited as much as possible.

The calculated net investments in agriculture, forestry, and fisheries are only a small part of the aggregate investments, but compared with the relative needs for investment in these occupations, the amounts are actually larger than in many other fields, and larger than in 1946. In agriculture and forestry it is estimated that building activities will decline from 1946 but this decline will be more than compensated by the provision of machinery and implements which have been given a high priority. In the case of fisheries, the increase will be about 10 mill. kroner.

In the case of commerce it has been estimated that stocks-in-trade will be increased by about 100 mill. kroner. Otherwise in commerce and finance, building and construction will be limited for the benefit of housing.

The objective of the housing policy is to produce 18,000 housing units. In the budget of building materials sufficient quantities of timber, bricks, and cement have been reserved for this purpose. The reason why housing has been given such a high priority is not only considerations of social welfare, but also because it is necessary, in many places, to build houses for workers and employees before new enterprises, or the

expansion of old ones, can be contemplated. This applies to the war damaged areas as well as to many other places.

Today, a larger part of our economic resources will be required for purposes of defence than before the war. Here, too, as in most other fields, it has been attempted, in the first place, to provide sufficient materials and equipment, while building and construction has been limited.

The total net investments during 1947 are above the average required to restore, over a period of five years, the capital loss suffered during the war. In some sectors the whole loss has already been recovered, but in others the restoration will require more than five years. On the whole investment will proceed at a different rate in the various fields according to the relative importance of the investment in question from the point of view of the whole community.

The changes from 1946 to 1947 in production, imports, exports, consumption, and real investment may be summarized as follows:

	mill. kroner
Increase in net national product	750
Increase in imports of goods and services	700
Increase in total supply of goods and services	1,450
to be allocated as follows:	
Increase in private and public consumption	200
Increase in private net capital formation	550
Increase in public net capital formation	150
Increase in exports of goods and services	550
Total	1,450

It will be observed that of the total estimated increase in supply of goods, 550 mill. kroner have been reserved for increased exports. The rest, amounting to 900 mill. kroner, will be used to the extent of 22% for consumption, and as much as 78% for real investments. The major part of the increase in resources available for domestic use will thus be applied to the restoration and development of the capital equipment.

The increase in real investment is to some extent reflected in a larger deficit on current account in the balance of payments, while the remainder means a greater rate of increase in the national wealth. This will appear from the following statement which shows an estimated increase in the national wealth during 1947 of 1,050 mill. kroner, compared with 500 mill. kroner in 1946. In other words, the increase during 1947 is expected to be twice as large as in 1946.

In appraising the value of these figures it should be borne in mind that the increase in the stock of private motorcars, furniture, clothing and other personal property, apart of dwellings, has not been included in the figures for net capital formation in 1946 and 1947. It is likely

	<i>mill. kr.</i> 1946	<i>mill. kr.</i> 1947
Private net capital formation	1,000	1,550
Plus net public capital formation	300	450
Total net capital formation	1,300	2,000
Less current deficit on balance of payments	800	950
Increase in the national wealth (not including personal property)	500	1,050

that also this part of the national wealth will increase at a faster rate during 1947 than in 1946.

The above statement shows, *inter alia*, how capital formation will be financed. According to these calculations 950 mill. kroner of investments during 1947 will be met by the current deficit on the balance of payments, which is equivalent to a corresponding expenditure from foreign exchange reserves and foreign credits. The remaining amount of 1,050 mill. kroner will be covered, according to the budget, through domestic savings, which means a corresponding increase in the national wealth. Accordingly, under the terms of the 1947 budget, savings will produce 53% of the capital formation, as compared with only 38% in 1946. The foreign exchange situation will necessitate a reduction of the current deficit on the balance of payments in the future, leaving a still larger part of the capital formation to be drawn from domestic savings.

As already mentioned, even when the national budget is set up as a program of economic policy it has to build on a series of assumptions. As an illustration, deliveries of new ships, machinery, other capital equipment, raw materials and fuel from abroad will influence not only the extent of real investment and imports but also, indirectly, the size of the national income. If deliveries turn out to be better than calculated in the budget, this will lead to larger imports, larger real investments, and a somewhat larger national income, while defaults will lead to corresponding reductions. Furthermore, a number of conditions determined by nature may alter the basis on which the budget has been founded, for instance, in the case of agriculture, forestry, and fishing.

In setting up the national budget an attempt has been made to determine which factors of production are likely to represent bottlenecks. The most important of these today are manpower and building materials. By making efforts for increased production and by making dispositions according to a preconceived plan it is hoped that the unfavourable effects of these shortages will be considerably reduced. But other factors of production may also become so scarce as to have a restrictive effect on production and investment and thus necessitate modifications in the program which has been set up.

If a crisis should occur in foreign markets this will have to be offset by special expansive measures to counteract the contractive influence from outside. And even if there is no general turndown in world markets, price developments may nevertheless affect the assumption on which the budget has been built.

Besides unforeseen changes in deliveries of goods from abroad, the natural conditions, unexpected developments of scarcity factors, and changes in the terms of trade, there are a number of other circumstances which may create differences between the budget estimates and the actual figures as shown by subsequent accounts. Thus it will be necessary to make adjustments in a number of budget items if there should be changes in taxes, prices, and wages that prevailed at the turn of the year and which have been taken as a basis for the calculation, or if the increase in productivity should fail to materialize or be larger than assumed.

In the practical application of the national budget these circumstances will be borne in mind. The plans will be modified, and the economic policy adjusted accordingly, so far as this should be required when changes occur in the conditions and assumptions on which the budget is built, and as and when better information is available or more experience is gained.

The Netherlands: Planning under Duress

Introduction

IN THIS chapter we reproduce the major part of the *First Memorandum on the Central Economic Plan 1946 and National Budget 1947*, the product largely of the brilliant Dutch economist, Professor J. Tinbergen. Planning in the Netherlands was clearly the product of distress. Occupation had seriously reduced new investment and led to deterioration of existing capital; and for September 1945, productivity was estimated at but 57 per cent of pre-war output. Even for 1946, the plan called for consumption of 74 per cent of 1938, an amount that greatly exceeded the percentage of output in 1946 relative to 1938—*inter alia*, because savings would be a relatively small part of income for 1946, and consumption in part was of durables, not currently produced.

A feature of the plan is the assumption of maximum freedom of choice. "If the goods available correspond with those in demand, the greatest possible harmony will be achieved." But this freedom of choice is to operate under the controlling principle that first things come first. If consumption is to be cut, it is necessary that production of the least essential items be stopped first.

Yet the plan yields a curious mixture of control by planners and consumers' sovereignty. Thus, the consumer is to be allowed more durables than might be suggested by the relative level of income in 1938 and

1946, for his inventories have been exhausted, but less than might be suggested by the amounts held in 1938. Here the architects of the government determine the supplies to be subject to consumer decisions. But note the following: where, despite the very large reduction in income, the public needs small quantities of goods for hygienic and cultural purposes, the curtailment should not be drastic. It is not assumed, furthermore, that it would be expedient to reduce consumption greatly of goods required to maintain the social position of the consumers.

In short, the sovereignty of the consumer should continue to play a large part in the allocation of economic resources. Again, since prices no longer serve their usual function in scarce markets, the consumer cannot make the adjustments unaided. It is, therefore, necessary to have rationing.

In view of the acute shortage of capital, the nation's budget provides for a relatively small amount of consumption and much capital. Approximately 10.2 billion guilders, the national output, were to be available in 1946. Consumption excluding indirect taxes was to account for but 50 per cent; net capital formation, 20 per cent; and public authorities, 30 per cent. Actually the results attained were not so good as had been anticipated and investment was greatly curtailed and consumption somewhat reduced in relation to the early 1946 estimates.

In a capital-starved economy, it is necessary in the early years of reconstruction to invest heavily. By the use of multiple shifts, by excluding investments that would not yield consumers' goods within a few years, and by ingenious incentives (e.g., a subsidy on housing to be levied on landlords, who are to be allowed to charge higher rents), the planners would both economize on capital and provide the incentives. With the passage of time, both capital and government would absorb a declining part of the product, with consumption within a few years exceeding the pre-war level.

"The money flows should be in equilibrium with the flows of goods, if inflation on the one hand and unemployment on the other hand are to be avoided." Among the paths to monetary stability were to be a savings program, both voluntary and compulsory, which would preclude monetary hoarding, a monetary purge (already effected), measures militating against excessive exchange of wealth for money and consumption goods, a structure of costs in relation to prices which would assure the use of idle cash by the capital market.

This brief summary highlights this ingenious economic plan. Proudly the authors disdain large foreign credits which would raise serious exchange problems later, and oppose an increase in the value of the guilder on the grounds that the recovery of export markets depends on price concessions compatible with falling, not rising exchanges.

First Memorandum on the Central Economic Plan 1946: Introduction ¹

Central Economic Plan

This plan is to be drawn up at regular intervals for the purpose of co-ordinating the government policies in the economic, social and financial spheres. In terms of the bill dealing with this subject, and submitted to the Second Chamber of States General on 24th March 1946, the plan should contain e.g. groups of figures relating to the volume of production aimed at, the expected price level and its presumable trend, the national income and its components, the spending of that income, and all further items of importance for the purpose indicated. The Central Economic Plan should therefore consist of a harmonious complex of estimates and directions.

The drafting of such a plan is the Central Planning Bureau's task. . . .

Concept Plan

In spite of these difficulties,² the labours of the C.P.B. have now so far advanced, that with the defective means at its disposal it has been able to draw a global, if in some essential points still incomplete picture of the existing situation. On this basis, a concept plan has been designed. Together with a number of alternatives, this plan, embodied in an extensive memorandum, has been submitted to the Council of Ministers in April 1946. Upon confirmation of the most essential figures by the Council of Ministers, the C.P.B. will draw up a definite Central Plan 1946 which is to guide the agencies charged with the planning for the individual sectors of the national economy. Only upon completion of this more detailed plan will a full co-ordination of the plans of the various ministerial departments become possible.

With a number of departments in charge of the government's economic, social and financial policy the C.P.B. entertains close relations, which enables a tuning of the plans of these departments to the possibilities existing within the limits of the Plan 1946. For example, the C.P.B. is represented in the Interdepartmental Committee on Wages and Price Policy (Social Affairs), in the Priority Committee on Reconstruction (Public Works and Reconstruction), in the Committee for Capital Movements (Finance), and in the Bank for National Recon-

¹ Central Planning Bureau of the Netherlands: *First Memorandum on the Central Economic Plan 1946 and National Budget* (The Hague, Sept. 1946), pp. 5-47.

² Discussed in a previous section and omitted here.

struction. Further, the C.P.B. frequently checks with the Planning Section of the Department of Trade and Industry, as well as with the Departments of Traffic and Power, of Agriculture, Fisheries, and Food Supply. In this connection it may be mentioned that the current import and export plans fairly well agree—at least in their aggregate—with the Plan 1946. The same is the case with the foreign exchange balance. As to the accuracy of the foreign trade plans in respect of the classes of goods concerned it is not, however, possible to express any judgment at the present moment.

If thus, almost imperceptibly, a certain co-ordination has taken place, it cannot be said that complete co-ordination has been achieved, because some of the ministerial departments could not yet muster adequately determined plans. As the Planning Bureau is getting into proper working order, the approach to the departments and the formulation of their plans can be more conveniently adjusted to the needs of co-ordination. Thus, for example, the question may be considered whether the import and the comprehensive renewal of railway materials are in accordance with the general economic condition of the country.

Further, it is intended to periodically revise the plan, and to submit fresh figures reflecting the influence of new facts entering into the picture. . . .³

Background

For a better understanding of the figures and the comment to be made thereon, it is desirable to sketch in a few lines the background of the present economic situation. This background consists of the dislocation caused by the war. In the economic sphere this may be described as follows: (a) losses of population and labour forces, both in quantity and quality; (b) loss (or temporary destruction) of soil; and (c) loss of stocks, both of consumers' and producers' goods, in the broadest sense. The latter are usually indicated as capital losses; speaking economically, they are the most important of the three named. These losses signify that less can be produced, while on the other hand, next to the normal current needs there is a strong additional demand for all kinds of goods: the depletion of the stocks of consumers' goods as well as the damage inflicted upon and the omitted renewal of the productive apparatus require repair and replenishment.

Apart from the losses suffered in this country there are the difficulties experienced abroad which affect our national economy. The supply of foreign goods has become much more difficult. Besides, the circumstances of war and its aftermath require various kinds of interference by the authorities, engaging part of the productive forces.

³ In an omitted paragraph, the provisional nature of the plan is indicated.

Transitional Difficulties

During the occupation, the Netherlands national economy was centrally directed under foreign domination and for other purposes than now pursued. Although during the first years of scarcity economics after the war, central direction remains just as necessary, an important reorientation is imperative. For this reason we are now passing through a transitional period, during which all forces have not yet found their proper application. However, in the sphere of production, imports and exports, a purposeful planning will only become possible when, after consultation between the authorities and business circles, the central plan has taken definite shape; when the resulting directions have been passed on to the subordinate planning agencies and translated into measures ensuring the execution of the plan. As it will take some time before such measures overcome certain frictions and delays, it may well be assumed that the stage of fully established planning can only be reached in the course of the second half-year of 1946. Meanwhile life is going on, and before this stage is reached, many measures will have been taken which—more especially in the matter of our foreign relations, such as credits, imports and exports contracted—will be found to be irrevocable, and will no doubt impede more or less the realization of the central plan. Consequently, the concept Plan 1946 unavoidably bears a dual character. Only gradually economic life in this country will follow the path of its most desirable development. For the preceding period, the plan plots the development that may be expected without a carefully considered, purposeful and centrally directed planning.

Available Means

The object of the plan figures is to establish in what manner an optimal satisfaction of the Dutch people's needs can be achieved. This problem should, however, be viewed over a period of sufficient length so as to avoid "short-sighted" decisions. The starting point should be the consideration that the total quantity of goods and services, becoming available for distribution, must be equal to: (a) current production, of which a portion may be exchanged with foreign countries; (b) import on credit or against sale of foreign balances or investments; (c) reparations, recuperation; and (d) consumption of capital in a physical sense, i.e. the depletion of stocks or the wearing out of plant without its renewal. It is clear that this possibility is undesirable, though not always avoidable under present circumstances.

Of the sources named, that of production—as will presently become apparent—is the most important. Production is achieved by co-operation of labour, land and capital, but—in a country with few raw materials of its own—not without a possibility of acquiring raw materials abroad in

exchange for exportable goods. In the case of the Dutch economy, therefore, productive capacity of each branch of industry and its component factors should be considered, as well as possibilities of import, export, and acquisition of foreign credits.

In practice, it is mostly possible to work on more exact data. So, for example, for a branch of industry with sufficient equipment, production may be determined by the number of skilled labourers available and their productive capacity. Such is, approximately, the case in the coal mines, where at present the labour factor represents the bottleneck, on which everything depends. For a branch of industry with sufficient labour supply, the extent of the plant together with, perhaps, the efficiency of the labourers, may be determinant. To obtain an idea of the possible production of the national economy as a whole, assuming that the means of production are adequate, an estimate may be construed from the average productivity in a number of industries and the total number of labourers employed. Insofar as various means of production are complementary, the capacity of the scantiest will determine the productivity of the whole. In a sense, such is just now the case in this country with coal (including some other forms of power derived from it). Therefore the possibilities of power supply are of particular importance. The same may be said of the possibilities of transport, the import of raw materials and the supply of skilled labour.

Working Method

The method followed is this, that in the first instance an estimate is made of the possible total production, based on the available quantity of labour and its productive capacity, taking into account such factors as might cause a bottleneck. Having thus fixed the approximate supply of goods and services at the disposal of the Netherlands national economy, it is further examined what demands are likely to be made on this national product in behalf of: (a) consumption (pp. 375-76); (b) reconstruction and other investments (pp. 376-84); and (c) public authorities (p.384).

Moreover, directions will be given for the order of urgency, in which these demands are to be considered. By confrontation of possibilities and demands, if possible for a number of years, it may be determined which demands can be satisfied (pp. 384-90). These considerations concern the flow of goods and services. Next, however, attention should be given to the monetary factor, in order that it should not exert any undesirable influence upon the real course of events (pp. 385-87). Thereafter an attempt will be made to group the plan figures in a convenient manner after the methods of the national accounting (pp. 388-89). Further, some attention will be directed towards a number of alternative possibilities (pp. 389-90), while the most important results will be summarized

in a few conclusions (pp. 391-92). Finally, possible bottlenecks and some statistical desiderata will be discussed in two appendices.

The National Product and Other Means

The National Product

Method of estimating. The estimating of the national product, as far as formed in the enterprises, by means of the available forces of labour, is based on the estimated value of production in 1938, corrected for changes in: (a) the extent of the population engaged in trades and professions (occupational population); (b) the proportion of the occupational population actually engaged (employment); (c) the average productivity of labour; and (d) the average price level of the goods produced.

The portion of the national product consisting of services rendered by public servants (including the defence forces) and of capital invested in the public economy, is estimated in a different manner (pp. 376 ff.). The public enterprises are not included in the public sector, but ranged among the enterprises. . . .⁴

Productivity of labour. The productivity of labour is the quantity of product rendered per time unit by all persons engaged in the process of production. For persons engaged in industry, agriculture, fisheries, trade and transport in 1946 this productivity was originally estimated by the Central Planning Bureau at an average of 85 per cent of the 1938 level, this estimate being partly based on private information. Working on the same information, the productivity in the last quarter of 1945 was put at 70 per cent of 1938. Since then, however, the Central Bureau of Statistics supplied various data indicating that towards the end of September 1945, productivity must have approximated 57 per cent. This would mean, that it rose from 57 to 70 per cent within a month and a half. Even when making allowance for the effects of the monetary purge as well as for the fact that the rise in productivity of labour is likely to slow down, such a rise in so short a period must be considered improbable. The figure 70 is therefore thought to be too high, and consequently the estimate for 1946 has been brought down to an average of 80 per cent of the 1938 level. This average may eventually be found to reach a higher point, if the effect of factors, depressing it so far below the level of 1938, should prove less serious than is expected at the present moment.

Such factors are the shortage of skilled labour, about which no data are available, and the present scarcity of foreign exchange resulting in a prolonged deficiency of certain raw materials. Eventual difficulties in

⁴Two omitted paragraphs give a detailed discussion of the manner of estimating the occupational population and employment.

both these respects have been discounted in the estimated productivity of labour.

The data discussed in Annex I of this memorandum⁵ suggest a reasonable chance that neither difficulties of transport nor lack of power will endanger this program. The C.P.B. is therefore of the opinion that, if every effort be made, there will in fact be sufficient transport and power. Accordingly, this will henceforth be assumed to be the case.

Price levels. The *factor cost* consists of the cost of labour and other costs. The income per hour being put at an average of about 165 per cent of 1938, the level of labour costs for 1946 is estimated at about 200 per cent of 1938.

As, for the present, other costs, compared with 1938, will have increased less than labour costs, the total costs may be assumed to reach 180 per cent of the 1938 level.

The price level of *imported raw materials and semi-manufactured goods* has been determined as follows. For the estimated industrial imports in 1946, which will for one half originate from the Western hemisphere and for the other half from Europe, the price level stands at 294 and 230 per cent, respectively, that is at an average of 262 per cent of 1938, while the price level of the estimated agrarian imports, forming a quarter of the total estimated volume of imports, stands at 298 per cent of 1938, so that the average general price level comes to 269 per cent of 1938. Allowing for a fall of the very high freight tariffs, which at the beginning of 1946 stood at a level of 415 per cent of 1938, and for a slight fall of world prices of raw materials, the price level of these imported goods has been put at 269 per cent of 1938.

Summarizing the foregoing computations, and assuming the physical import quota to be the same as in 1938, when it amounted to 23 per cent, the price level of this country's total *gross product*—by which are meant the goods and services becoming available to the consumer in or for export from the Netherlands, excluding, however, services rendered by any government authorities—comes to 0.23×260 plus $0.77 \times 180 =$ about 200 per cent of 1938. It goes without saying that this figure is no more than a rough approximation.

The various kinds of products, composing the gross national product, have not, moreover, the same price level. Goods made up of costly raw materials, as for example in the building trade, or those manufactured in an industry where the productivity of labour is low, will have risen relatively more than 100 per cent in price. Services have risen less, upon the whole. On p. 387 it is assumed that the level of rents will have to rise in 1946. It would be desirable, however, only to allow such rise according as it is compensated by price reduction resulting from a rise

⁵ Omitted here.

in the productivity of labour. In this way it may be possible to keep the price of the "*consumer's packet*" well under 200 per cent of 1938—at any rate if the increase of *indirect taxation* be neglected.

Assuming that such taxes will weigh especially upon non-essential consumers' goods, the cost of living index of the lowest income groups may be put at 185 per cent of 1938.

In all these calculations it is assumed that the subsidies still being paid at present to lower the costs of living, will be gradually abolished. If this is done in due relation to the increase of labour productivity, it will be possible to avoid too big a rise in the cost of living.

For the *public services* it is difficult to speak of a price level.

Net product of enterprises in 1938. From an unpublished Memorandum of the Central Bureau of Statistics on "National Accounting: purpose, problems and results" (Sept. 1944), relating to 1938, the income from productive services of all enterprises in that year may be computed as follows:

NET PRODUCT OF ENTERPRISES IN 1938

(in millions of Glds)

1. Payments to productive agents (including payments for pensions and social insurance)	4,131
2. Internal financing of companies	240
3. Profits of public enterprises accrued to State, Provinces and Municipalities	56
4. Interest and repayment by public enterprises to authorities	96
5. Other payments to authorities (excluding indirect taxes ⁶)	155
	<hr/> 4,678
Deduct: Subsidies paid by public authorities to enterprises	62
	<hr/> 4,616
	<hr/>

Volume of production and net value of production in 1946. In view of the available forces of labour the volume of production in 1946 may, from the foregoing, be put at: $0.98 \times 0.80 \times \frac{89}{84}^7 = 0.83 \times$ the volume of 1938.

The net value added of production, the so-called national product or the additional value of the Netherlands national economy may now be calculated as follows: the "available occupational population" will produce: $0.83 \times 1.80 \times 4,616$ million Glds. = 6,900 million Glds.

This amount is only partly being paid by the enterprises to the fam-

⁶ The exact nature of this item was not quite known upon completion of this memorandum. Possibly, part of it will have to be inserted elsewhere, and corresponding alterations in the calculations may be necessary.

⁷ i.e., Percentage of occupational population \times percentage of labour productivity \times relation to employment quota.

ily households. It also includes the internal financing of companies and payments by enterprises to the authorities (excepting indirect taxes). Both items are difficult to estimate for 1946. They have been roughly put at 900 million Glds. together, allowing for the general rise in prices since 1938 and for the probable fall in profits due to the lowered production. On the other hand, payments made to family households should be increased by the amount of subsidies granted to enterprises viz. 100 million Glds. The productive incomes paid by enterprises to the family households should therefore be put at 6,100 million Glds. The value produced by the civil military and public services may be deduced from the amount of salaries paid and from the interest on capital invested in the public sector, and put at 1,430 million Glds. (see p. 383). *The total value of production comes therefore to 8,330 million Glds.*⁸

Other Means

Apart from their own production, the Netherlands will be able to satisfy their needs from some other sources, which will now be examined.

Reparations and recuperation. As a first source should be named reparations made by Germany. It is assumed that coal, electricity, and gas can be supplied. This will probably involve amounts remaining within 100 million Glds. in all. Moreover, it is even very questionable whether such supplies will take the form of reparations. In this global summary they will, therefore, be inserted merely "pro memoria." To be on the safe side, possible reparations in the shape of industrial plants, ships, etc. are also mentioned pro memoria. . . .

Home consumption of capital. A second possibility is the home consumption of capital. Unexhausted stocks, it is true, are hardly available anywhere, but the use of means of production without their renewal is still possible within certain limits. It goes without saying, however, that this source should be drawn upon as little as possible.

Use of foreign balances. Upon de-blocking, certain liquid balances held abroad can be used for the payment of imports. For this purpose, about 600 million Glds. are available, in the following proportions: in the United States 120 million \$—318 million Glds.; in Great Britain 30 million £—321 million Glds.

Foreign credits and liquidation of foreign assets. The taking up of foreign credits is another possible source of financing. It is desirable to make use of this possibility, though with caution, as sooner or later such

⁸ In principle, the income from foreign investments is included in this figure. As this income, however, represents a relatively small portion of the whole and is difficult to estimate for 1946, it is not expressly dealt with here. The next section estimates gross product, i.e., net plus imports.

credits will have to be repaid. This will only be possible by a stimulation of exports, which requires relatively low prices of our export products. In view of the relatively low elasticity of the demand for our products, a considerable price margin of some tens of per cents will be found necessary for this purpose. If such a difference in price with goods competing in the world markets is to remain within bounds of economic and social reason, the credits, too, will have to be kept within moderate limits. Calculations made by the Central Bureau of Statistics show that the transfer capacity of the Netherlands allows the taking up of foreign credits or the liquidation of foreign assets to the extent of about 6,000 million Glds. in the aggregate. Of this sum, about 1,000 million Glds. have been used already in 1945. In the light of these figures, it seems justified to take up about 2,000 million Glds. in 1946, including the use of balances abroad. In order to satisfy certain minimal demands it will be desirable, as will hereafter become apparent, to take up at least 1,200 million Glds. An amount of this magnitude will not be wholly obtainable in the form of new credits. It will be necessary, therefore, to decide upon a partial liquidation of foreign assets.⁹

Recapitulation

Summing up, we arrive at the following statement of means, available for the satisfaction of requirements in 1946:

Home production

(in millions Glds.)	
(a) By public authorities	1,400
(b) Other production	6,900
Recuperation	100
Use of foreign balances	} 1,800
Foreign credits	
Liquidation of foreign assets	
Total	10,200 ¹⁰

According to the spending programs to be discussed in the following paragraphs, this total of means will be fully required and will have to be distributed as follows:

(a) consumption excluding indirect taxes	5,200 million Glds.
(b) net capital formation	2,000 " "
(c) public authorities	3,000 " "

⁹ There follows a detailed discussion of the manner in which the 1,200 million Glds. are to be obtained.

¹⁰ A supplement (not reproduced here) as of September 1946, puts the national product at 7,400 instead of 8,300 million Glds.; foreign credits 1,300 instead of 1,800; consumption 6,000 instead of 6,300; and capital formation, 1,000 instead of 2,000 million Glds.

Public Economy

The Estimates Defined

To obtain an idea of the contribution to the national product supplied by the military and civil authority personnel, and by the capital invested in the public economy, as well as the demand made by the authorities upon the national product, it is necessary to gather an impression of the total public expenditure to be expected in 1946. . . .¹¹

Conclusion

The contribution towards the national product, provided by the public sector excepting the public enterprises and reconstruction, may therefore be put at 1,430 (1,240 plus 190) million Glds., while the demand it makes upon the national product equals 3,040 millions.

The Extent of Consumption

Harmony

To ensure the greatest possible satisfaction of demand from the available productive powers, the distribution of such powers over the respective branches of activity should show a certain harmony. This applies to distribution over the main sections of economic life such as the spheres of consumption and investment, as well as distribution within each of these sections. The purpose of this principle and the way in which it may be applied, may be clearly illustrated by the example of the sphere of consumption, as to which harmony implies that managed economics should follow the consumer's preference as nearly as possible.

The total quantity of goods available may be expressed in a certain money value by taking the prices of 1938 as basis. The higher this value per average household, the greater will be satisfaction or prosperity. Every thinkable satisfaction of demand corresponds with a certain income, expressed in prices of 1938. If this income is the same as on average became available in 1938, namely 2,200 Glds. per household, then it may be said that the *comparative income* is 100 per cent of 1938 and that a corresponding level of prosperity has been reached. If the satisfaction of demand corresponds with an income amounting to only 60 per cent of that received in 1938, then the comparative income is 60 per cent and so on.¹²

¹¹ We omit details on items not included, and a table summarizing public expenditures, classified as follows: wages and salaries, interest, materials, and transferred incomes.

¹² A table of public expenditures is left out here.

Each level of prosperity implies a certain optimal spending of income on various kinds of goods. If the goods available correspond with those in demand, the greatest possible harmony will be achieved. One of the characteristics of such harmonious distribution of goods is that in the event of a fall of the prosperity level the consumption of the most essential goods is curtailed less than that of the less essential ones, suggestive of luxury. It is part of the plan to meet such preferences of consumers as far as possible. We may visualize this in the shape of "consumer's packets" of various composition, which we shall call packets I, II, III, etc., each corresponding with a certain prosperity level. If packet I contains goods of the lowest prosperity level, packet II those of a higher one, and so on, then the goods of packet I are more urgently required than those which have been added thereto in packet II. Still less essential are the goods added in packet III, and so on.

Necessary Adjustments

In principle the composition of these "packets" may be gleaned from family budget statistics compiled by the Central Bureau of Statistics, which are supposed to reflect the differences in the consumer's preferences at different incomes. Certain corrections should, however, be made to the figures arrived at in this way.

(a) The war has caused considerable arrears in the supply of durable consumers' goods. With a given provision of non-durables goes a certain inventory of durables, the use of which really forms part of current maintenance. Just as urgent, therefore, as the purchase of a quantity of non-durables (for example bread) belonging to a comparative income of 60 per cent, is the possession of durables such as, for instance, shoes, which correspond with that prosperity level. The extent of such inventories may be gathered from a return compiled by the Committee of Inquiry into War Damages in Rotterdam. Owing to the necessary additional purchase of durables the comparative income will be lower than the actual income required to attain the corresponding level of prosperity.

It is questionable, however, whether the acquisition of durables should indeed be allowed to reach a point corresponding with the comparative income of 1938. When a durable commodity is bought, future services are, in a sense, bought simultaneously, and it is very likely that the appraisal of these future services has declined; in other words, that the momentary need has raised the individual rate of interest. It is next to impossible to fix the exact proportion in which durables and non-durables should be demanded. Nevertheless, an attempt has been made to take this into account as nearly as possible.

Further it may be pointed out that, in the matter of arrears, the

sufferers from war damages and the families newly formed during the war ought to have priority.

(b) The degree of *scarcity* of the various goods is different. There are goods, and especially services, which even now are free. There are others, for instance coal, which are extraordinarily scarce. The proportion in which the goods are included in the "packet" should be adjusted to such plenty or scarcity. This should be done by way of rationing, for in present circumstances price is no longer an indication of scarcity, so that the consumer cannot effect the adjustment by himself. For free goods it is assumed that these are being consumed in the same quantity per head as in 1938. For an item like house rent we assume that total consumption equals that of 1938, seeing that the available living space is only little less than it was in 1938.

A special case of scarcity constitute durable goods. The scarcity factor for these is the element capital.

(3) A number of commodities covering *hygienic* and *cultural* demands are used in very small quantities by people living on a low level of prosperity. It is a matter of high importance, that consumption in this case should not be curtailed as drastically as would follow from the family budget statistics.

(d) Likewise there are goods and services, consumption of which does not so much depend upon income as upon the social position in which a family is placed. Of these goods, too, it cannot be assumed that their consumption will be reduced to the extent suggested by the family budget statistics. Here a medium path has been chosen.

Durable Consumers' Goods

In determining the accumulated demand for durable consumers' goods cyclical influences have been eliminated, which in the budget statistics is expressed by relatively few purchases of a number of durable consumers' goods in 1935-36, when the inquiry was being held. Further, the number of years during which the renewal was postponed has been put at three (1943-45). In distributing the ration of durable consumers' goods, placed at each family's disposal, the preliminary results of an inquiry held by the Central Bureau of Statistics into the preferences shown by consumers for the purchase of certain durable consumers' goods could be used. The result of calculations relating to durable consumers' goods is summarized in the table below.

Non-Durable Consumers' Goods

The above corrections mentioned under (b) to (d) result in an extension of the consumer's "packet" beyond the consumption corresponding with the average comparative income in question.

TOTAL DEMAND FOR VARIOUS DURABLE CONSUMERS' GOODS IN 1946

(on comparative incomes of 40 and 60 per cent respectively, expressed in millions of Glds. at prices of 1938 and in percentage of consumption in 1938, respectively.)

<i>Class of Goods</i>	<i>In mill. Glds. at prices of 1938</i>		<i>In per cent of consumption in 1938</i>	
	<i>40 pct.</i>	<i>60 pct.</i>	<i>40 pct.</i>	<i>60 pct.</i>
1. Clothes	255.2	385.8	81	122
2. Footwear	55.5	83.6	94	142
3. Furniture	43.4	72.7	39	66
4. Household textiles	91.1	141.8	88	138
5. Floor-and wallcovering	57.9	93.4	85	136
6. Kitchen and table utensils	27.6	44.5	55	89
7. Stoves and heaters	21.2	37.2	50	89
8. Tools, washing and cleaning requisites	6.3	10.1	18	28
9. Sundries	73.5	111.5	..	...
Total	631.7	980.6	74	115
of which:				
accumulated demand	305.7	461.2	..	...
allowances to war victims	42.7	73.4	..	...

Food

With regard to foodstuffs, the question has been examined, which comparative income corresponded with the rations of November 1945. This appeared to be the comparative income of 40 per cent, which for an adult comes to 2,073 calories a day. Therefore it may be concluded that this level, at least for foodstuffs, represents a minimum that ought to be reached in any case. Should it be found necessary to maintain so low a level of prosperity, then the food value of the foodstuff "packet" can only be raised by means of the best possible composition of this "packet," as regards the products included, and by selecting cheaper qualities whenever possible, thus allowing larger quantities to be distributed.

Recapitulation

Finally, the table below presents a survey of the total money value of consumption in the case of different comparative incomes, at 1938 prices. It appears that in order to attain a prosperity corresponding with a comparative income of 40 per cent—which for the reasons stated must be considered a minimum—after deduction of the indirect taxes prevailing in 1938 (11.9 per cent of the aggregate value of goods and services consumed), an amount of 5,150 million Glds. will be required.

Looking into the figures of this table, and allowing for an increase of population in the period 1938-46 of 7 per cent, we find that the total

TOTAL VALUE OF CONSUMERS' GOODS DEMAND

(at various comparative incomes, in millions of Glds. at prices of 1938)

	1946							1938
	40 pct.	50 pct.	60 pct.	70 pct.	80 pct.	90 pct.	100 pct.	100 pct.
1. Foodstuffs	1250	1360	1440	1530	1590	1640	1680	1600
2. Other non-durable consumers' goods	1280	1330	1380	1440	1500	1560	1620	1540
3. Durable consumers' goods	630	820	980	1140	1490	1850	2220	850
Total (some errors—ed.)	3160	3510	3348	3621	4035	4449	4863	3990
Indirect taxes (1938 rates)	376	418	452	489	545	601	657	475
Total excl. indirect taxes	2784	3092	2996	3132	3490	3848	4206	3515
In mill. Glds. and at prices of 1946 (1.85×those of 1938)	5.15	5.72	6.19	6.70	7.46	8.23	9.00	....

consumption per head in 1946 will amount to 74 per cent of that in 1938. For the respective classes of goods these percentages will come to: 73 per cent for foodstuffs, 78 per cent for other non-durable consumers' goods, and 69 per cent for durable consumers' goods. That these percentages all exceed 40 per cent may be attributed to three causes viz.:

(a) the item durable consumers' goods includes current consumption as well as the accumulated demand;

(b) for reasons explained above, the item non-durable consumers' goods had to be corrected by an increase;

(c) savings are less in the case of the lower than in that of the higher incomes, so that in the former case the amounts on consumption is relatively higher than in the latter.

Capital Formation

General Principles

A harmonious program. As explained before, the Plan for 1946 should indicate a harmonious distribution of productive forces in such a way that in one branch of industry no goods should be produced of a less urgent character than those of another branch. In respect of capital goods this means, that only such goods should be made as are needed to attain the consumption level thought admissible for the present and the next few years, as well as to ensure exports which, in addition to

eventual foreign credits, are required for payment of imports for consumption.

Housing. Next to the production of capital goods in the narrower sense, this paragraph will also deal with the housing problem, of which it might be argued that it concerns consumers' goods. It presents, however, a striking analogy with other capital goods in that a dwelling house may be considered as a "factory" producing "dwelling services."

Although in principle, therefore, the same argument may be applied as used just now in the case of consumers' goods, still certain important factors should be taken into consideration. In the first place, many "goods" of the kind considered here are objects of a very *large volume*, of a certain *indivisibility*, and also of a *long life*. This implies, that decisions in the matter of quality etc. must be taken that may be binding for a long future.

There are, however, certain possibilities to meet the demands of soberness for the near future. So for instance it has been found possible in Groningen to build for the present a number of houses with a ground floor only, leaving the addition of another floor until later.

In another respect, too, the indivisibility of dwellings plays its part. It will not be possible to provide a dwelling for each family at once, although normally, at a prosperity level of 60 and even of 40 per cent, each family should, as a rule, have a dwelling of its own. For some time, therefore, a certain amount of housing together will be unavoidable.

Indivisibility likewise applies to constructions for purposes of traffic. It would not, for example, be practicable to build bridges to suit traffic at a prosperity level of 80 per cent, and then, when traffic should have developed to a level of, say, 110 per cent, to build a larger bridge.

Building objects are not only difficult to divide but also tied to *locality*. With regard to such objects it is, therefore, important—more so than for instance in the case of the production of textile goods—where they are to be realised. This involves an important problem: that of geographic distribution. In particular, localities that have suffered most from the war, must be attended to first; the principle being that reconstruction should start in such localities where the percentage of remaining inhabitable houses is smallest, having regard to possible changes in the population.

Need of buildings for special purposes. With regard to a great many buildings the need is very hard to define. This applies in particular to buildings with a social or cultural purpose, and to those required for public administration. It also applies, however, to a number of business buildings, in so far as these often contain an element of representation, the usefulness of which cannot be translated into exact figures. In all such cases, more so than in the case of the production of

consumers' goods, the subjective judgment of a number of competent individuals will have to decide upon the right plan. The dominant question should, however, always remain: is the use of productive forces for a given building equally urgent as it is for consumers' goods which *are*, and more urgent than it is for consumers' goods which are *not yet* being produced?

Failing data. Before discussing concrete proposals for capital formation, it should be pointed out that such proposals can only have a very provisional and a very global character, because some of the most important data, on which they must in fact be based, are not available at this moment. This applies more particularly to the apportioning of damages over different classes of industry.

Buildings

The Building Plan 1946 of the Ministry of Public Works and Reconstruction, to which the C.P.B. has adhered, defines roughly the extent and composition of the volume of construction. The extent of it is based on the number of available qualified workers. At prices of 1946, a value of 790 million Glds. has been calculated. The plan is subdivided into a Buildings and a Public Works Plan, the former being composed as follows:

Housing	25 per cent
Industrial buildings	55 per cent
Other buildings	20 per cent

Further details of the subdivision are given in table 4.¹³ The number of new dwellings to be completed in 1946 is put at 10,000. In addition, of course, a large number of houses slightly damaged and a certain number of houses heavily damaged will have to be repaired.

The regional proportioning of the Building Plan is based on two principles: on the supply side the mobility of labour, and on the demand side the level of damage. Labour is in the first instance directed to the localities with the highest level of damage, but this tendency is restricted by the assumption that not more than 25 per cent of the workers can be housed outside their place of residence, while 25 per cent can travel to and fro over a distance not exceeding a certain maximum. . . .

Other Capital Formation

Working in shifts. A distinction ought to be made between (1) industries that cannot work in shifts or already did so in 1938, and (2) industries that did not do so in 1938 but have no technical objection in doing so. For the latter industries, when working in shifts, a consider-

¹³ This is omitted, as well as a discussion of replacements.

ably less amount of equipment may suffice than was needed before. In theory, when working in two shifts, half of the former equipment—and, when working in three shifts, one-third of the former equipment would for the time being suffice to employ the same number of men as in 1938. Evidently, in practice such possibilities are less than would appear from theoretic argument, because:

(a) it would not do to transplant labour from one locality to another just for this purpose;

(b) time has to be allowed for repairs and maintenance of the equipment;

(c) small differences in working methods or in product sometimes suffice to preclude the use of one and the same plant by different firms.

Nevertheless, as happened in the southern provinces immediately after liberation, such a possibility should be taken into consideration.

Further, it is of great importance to make a difference between industries producing consumers' goods and those manufacturing capital goods. As instances of the latter, the metal and brick industries may be cited. As clearly a strong demand for capital goods will prevail for a number of years both in this and in other countries, a speedy recovery of the previous capacity of these industries, working in shifts as far as possible, will be called for. The same applies to the important equipment required for traffic purposes; in this case working in shifts is hardly practicable.

Further elaboration. On the foregoing considerations, the following provisional program has been drawn up:

Reconstruction of the *apparatus of traffic*, so that this can cause no impediment to production, which by the end of 1946 will have attained the approximate level of 90 per cent of 1938. This does not imply that the capacity of the traffic apparatus itself must simultaneously have regained the proportionate level. In the first place, there was a certain surplus capacity in 1938; in the second place, transit traffic will be much less than before the war, which will particularly affect transport by rail and water. For these forms of transport, a transit trade of 40 per cent of 1938 has been assumed. And finally it may be said in a general way, that, through more efficient loading and manning, relatively less means of transport ought to suffice. . . .¹⁴

Replenishment of Stocks

Restricted replenishment. Finally, replenishment of stocks likewise pertains to necessary capital formation. The value of available stocks in 1938 is estimated at 2,500 million Glds. They were generally assumed

¹⁴ There follow details concerning investments in transportation, repairs, and replacements.

to be very ample. A partial replenishment will, however, be necessary. Even if some economy can be effected through simplified assortment and accelerated turnover, such replenishment will require at least 400 million Glds. before the end of 1946, at 1938 prices. It may be assumed that a certain replenishment already took place in 1945. At 1938 prices, a minimum formation of stocks will have to be assumed for 1946 to the extent of 200 millions, or, at 1946 prices, of 500 million Glds.

The Capital Formation Program as a Whole

Minimum program. Summarizing, we arrive at the following minimum program for 1946 of net capital formation and replacements, respectively:

NET CAPITAL FORMATION IN 1946 (in millions of Glds. and at prices of 1946)¹⁵

Buildings		170
Traffic:		
Ocean shipping	200	
Road traffic	140	
Inland navigation	15	
Railways	20	
Air traffic	15	
Total		390
Industry and Agriculture:		
Metal industry (incl. recuperation)	350	
Other branches	550	
Total		900 ¹⁶
Replenishment of stocks		500
Grand Total		2000

REPLACEMENTS (INCL. UPKEEP OF PLANT) IN 1946 (in millions of Glds. and at prices of 1946)¹⁵

Buildings	620
Traffic apparatus	250
Industry and Agriculture	380 ¹⁶
Total	1250
Of which: on account of public authorities	320
do. enterprises	930

¹⁵ Price level 1946=250 (1938=100), except for motor trucks and motor-buses (200).

¹⁶ From data become available since February 1946 it appears that the total amount of replacement and formation of plant in industry and agriculture will be very considerably less than the amounts shown here in consequence of difficulties in importing these capital goods.

Comparison of Available Means with Programs for Public Needs, Consumption, and Capital Formation

Preliminary Remarks

It has been calculated (pp. 376ff), what national production (net and gross) and what other resources the Netherlands national economy can probably have at its disposal in 1946. The amount required to satisfy the demand of each of the principal sectors has been fixed (pp. 371-72). Now we shall have to examine whether it is possible to meet this demand, and whether a deficit or a surplus of production is to be expected.

We shall first make this calculation at prices to be expected in 1946, exclusive of indirect taxes—that is at factor cost. As the indirect taxes mainly weigh on consumers' goods, the whole estimated yield of the indirect taxes on the basis of rates operative in 1938 has been deducted from the value of the consumers' goods, which results in the sum of 5,150 million Glds.

Confrontation

We now arrive at the following computation, in 1,000 millions of Glds:

Available for home requirements:		Required for:	
Net value of production	8.3	Consumption ¹⁷	5.2
Recuperation	0.1	Net capital formation ¹⁸	2.0
Import surplus	1.8	Services to be rendered by public authorities ¹⁹	3.0
	<hr/>		<hr/>
Total available	10.2	Total required	10.2

Conclusion

It appears from this confrontation that upon the suppositions made production would be just sufficient to cover the programs drafted, though it must be realised that the amount of 1,800 millions allotted for the important surplus, which has to be financed by borrowing abroad, represents in fact the difference left in the equation.

From information supplied by the Ministry of Finance there is a reasonable chance that this amount of foreign exchange, which the

¹⁷ Exclusive of indirect taxes, totalling 1,100 millions.

¹⁸ Inclusive of increase in stocks. It is not necessary to include replacements, as these are already included in the production value of the remaining goods and services.

¹⁹ Exclusive of transferred incomes, totalling 1,200 millions.

Netherlands economy cannot dispense with in 1946, will actually become available.

Although these calculations contain certain margins here and there, no such allowance could be made for consequences of possible (a) bad harvests, (b) strikes of some importance, or (3) difficulties of organisation (transfer of labour, etc.). The average productivity of labour has been put at 80 per cent, while it is further assumed that 11 per cent of the occupational population will not take part in the production (see pp. 366-368). Finally, it is assumed that power supply and inland transport will not be bottlenecks.

Duration of the Period of Recovery

Difference in Period of Recovery

The question forces itself upon us, in what manner the present low prosperity level will develop in the forthcoming years. This again involves the question, what will be the duration of the period of recovery.

In answering these questions, we should first of all realise that there is not one single period of recovery. As explained earlier (pp. 379-80), the first task is to raise the metal industry to its former level. This should be done *within the shortest time possible*, for so long as this branch of industry has not almost wholly recovered, production will be seriously hampered. Recovery of the *traffic apparatus* will have yet to take place *in the course of 1946* up to such a level as to ensure that no bottleneck is being formed. For the remaining *industry and agriculture*, reconstruction of the machine plant and other equipment has been put at *three years*.

There is an old truth that "cost goes before profit," and it is clear therefore that we must first be able to produce sufficiently before we can get consumption again on to the 1938 level. When will this happen? How will consumption develop in the next few years? To answer these questions, it is necessary, if only roughly, to visualize the development of the means as well as that of public expenditure and capital formation.

Suppositions

For this purpose, we shall make the following presuppositions:

((a) As regards the public authorities:

- (1) In 1947 and following years 150,000 men will be under arms;
- (2) Expenditure on armaments will be equally high in 1946 and 1947, but come down by 250 millions in 1948;

- (3) Civil service personnel will shrink by 8 per cent in 1947, by 3 per cent in 1948, and thereafter remain unchanged;
- (4) Material expenditure by the authorities, except for military purposes, will shrink by 5 per cent in 1947, by 3 per cent in 1948, and thereafter remain unaltered.

On the strength of these assumptions, the requirements of public authorities would amount to 2,900 million Glds. in 1947, and 2,600 million Glds. in 1948 and following years.

(b) As regards capital formation:

- (1) By training of labour and upon completion of the very intensive repair activities, the total building volume will at first grow strongly, say by 40 per cent in 1947, 30 per cent in 1948, and 10 per cent in 1949, and thereafter remain unchanged. At the same time, the composition of this volume will change: if in 1946 the building and repairs of bridges, factories and farms come first, while housebuilding activities are chiefly restricted to repairs, then gradually emphasis will be transferred to the building of new dwellings.
- (2) In 1947, further 400 million Glds. will be invested in the traffic apparatus; in 1948 and 1949, 150 millions, after which the damage will be wholly repaired;
- (3) In 1947 and 1948, an amount of 700 million Glds. will be necessary to restore depleted stocks, while in 1949, owing to expansion of production, an amount of 400 million Glds. will be required for the same purpose. In subsequent years, no replenishment of stocks.
- (4) As regards capital formation in industry and agriculture the 1938 level will be reached again in 1948, which will require 650 millions in 1947 and 600 millions in 1948, while in 1949 and subsequent years net capital formation to the extent of 500 million Glds. is anticipated, which will no longer serve for repairs of war damages.

The amount required for net capital formation therefore sums up to 2,200 millions in 1947, 2,300 millions in 1948, 2,000 millions in 1949, and 1,500 millions in 1950 and following years.

(c) In the matter of production it is further assumed:

- (1) that the productivity of labor in 1947 will be 95 per cent and in 1948, 102 per cent of the 1938 figure, while in each

- subsequent year there will be a further increase in productivity of 3 per cent on the preceding year;
- (2) that the power supply needed to attain the estimated volume of production will cause no bottleneck, nor that any bottleneck will ensue from any other cause;
 - (3) that the occupational population annually increases by 1 per cent, i.e., by about 40,000 persons;
 - (4) that in 1947, 25,000 political internees will be released;
 - (5) that, after necessary training and re-training of labour in 1946, employment in subsequent years is to attain 96 per ct.

Results

Calculations based on the above suppositions show that the volume of production in the years 1946-50 will reach 83, 109, 119, 124, and 128 per cent, respectively, of 1938, while the net national product, expressed in prices of 1946, rises from 8,300 to 12,000 million Glds. The results of these calculations are summarized in the following table:

REQUIREMENTS (EXCLUSIVE OF CONSUMPTION)

	(in millions of Glds.)			
	1947	1948	1949	1950
Public authorities	2,900	2,600	2,600	2,600
Capital formation	2,200	2,300	2,000	1,500
	5,100	4,900	4,600	4,100
National Product (net)	10,500	11,200	11,600	12,000
Available for consumption (excl. foreign credits)	5,400	6,300	7,000	7,900

Prosperity Levels in Subsequent Years

In order to define the prosperity level in 1947, a calculation has been made of the total need of consumers' goods in the case of various comparative incomes, starting from the assumption that in 1946 the accumulated demand is adjusted to a comparative income of 40 per cent. It then appears that, *without taking up any foreign credits*, a prosperity level of 50 per cent will be reached in 1947. In 1948, a level of 70 per cent could be realised, after which it might be raised to 85 per cent in 1949. By 1950 the 1938 level of 100 per cent would be easily surpassed. In the latter year, therefore, the whole of the arrears against 1938 in the supply of durable consumers' goods (the inventories of family households) would be squared. If, as a matter of policy, it should not be found desirable to keep consumption in 1947 on the low level indicated, and the government be prepared to incur further foreign debts, then the

prosperity level could be raised to 70 per cent by borrowing about 1,000 million Glds., or to 80 per cent by borrowing about 1,800 million Glds. In the latter case the limit of our transfer capacity, allowing foreign credits to an aggregate of about 6,000 million Glds., would be dangerously approached, as in 1945 and 1946 already the total of our borrowings came to 2,800 millions.

It should be noted, however, that part of the credits taken up in 1945 will come to the good of 1946, and that over the period in view a fall may be expected of the present, relatively high cost of building and other capital goods, as well as imported raw materials (lowering of freight rates), which will favourably affect the general picture drawn. *Nevertheless, the economic situation in which this country finds itself after the war remains difficult.*

Duration of Recovery

Summing up, it may be said that the period of recovery ought to last less than a year for the metal industry; three years for other branches of industry, agriculture, and the traffic apparatus; and from four to five years for durable consumers' goods, while the housing situation may well take some ten years to fully recover.

Final Remark

It goes without saying that the observations advanced in this paragraph bear a highly speculative character, and cannot therefore be regarded as any more than a very rough provisional approximation of the expected trend of development.

Demands of Monetary and Financial Equilibrium

Idle Purchasing Power

The observations made in the preceding paragraphs, though always couched in terms of money values, relate in fact to the material side of the nation's economy.

The money flows should be in equilibrium with the flows of goods, if inflation on one hand and unemployment on the other hand are to be avoided.

To maintain monetary equilibrium, first of all no "idle purchasing power" should be allowed to arise. With this object in view, all income elements not needed for consumption and payment of taxes, should in one way or another be placed at the disposal of the public authorities or of trade and industry.

In the following table, income and expenditure of family households have been summarized:

INCOME AND EXPENDITURE OF FAMILY HOUSEHOLDS

(in millions of Glds. and prices of 1946)

<i>Income:</i>		<i>Expenditure:</i>	
1. Productive incomes, paid by enterprises ²⁰	6100	4. Consumption, incl. indirect taxes ²³	6300
2. Productive incomes, paid by public authorities ²¹	1400	5. Direct taxes ²⁴	1200
3. Transferred incomes ²²	1100	6. To be saved	1100
	<hr/> 8600		<hr/> 8600

Compulsory Saving

The family households will realise a certain amount of voluntary saving.

In 1938 this came to about 12 per cent of the total personal income. In 1946 this proportion will certainly be less, seeing that the real income is considerably lower. Assuming that the proportion falls by one-third to 8 per cent, the voluntary savings of the family households may be put at 700 millions Glds.

It appears therefore that, apart from these voluntary savings, there is still an amount of 400 million Glds. not intended for consumption, and which should therefore be saved, by compulsion if need be.

Liquidation of Elements of Wealth

Next to drawing upon his idle purchasing power, the consumer may attempt to spend more than would be socially desirable by liquidating part of his property. This may assume fairly large proportions, if such

²⁰ See p. 388.

²¹ Wages and salaries of civil servants 1,200 and interest on public debt anterior of 1940, 200 millions.

²² Incomes transferred by Government 1,200 millions less subsidies for cultural purposes, public assistance to enterprises and subsidies on prices except food, in all 100 millions.

²³ Consumption, less indirect taxes according to rates of 1938, 5200 millions (see p. 376), plus 1,100 millions indirect taxes according to tariffs of 1946 (see note 24) and already increased with subsidies on food prices, still in force at present but perhaps soon to be abolished.

²⁴ Taxes estimated by means of rates in force in 1943, except for alterations proposed in Bill for Tax revision 1946.

people do not sufficiently realise their own as well as the general impoverishment, and, for example, seek to maintain a former standard of living, out of keeping with the present situation. Wherever this is to be expected, it will be necessary to take measures against such "dis-saving."

It would be possible to allow the sale of, and borrowing on, illiquid assets, i.e., all assets except non-blocked balances, against none but other illiquid forms of assets, for instance against blocked balances. In this way amounts, which otherwise could be saved by the buyer of these illiquid assets, are withheld from consumption by the would-be seller.

Of course a certain minimum amount of liquid means will have to be conceded for costs of living. This amount should take into account (a) the social position of the person in question, and (b) the need of general retrenchment.

Demands to Be Made upon the Structure of Prices

Due care must not only be taken that no unspent balances accumulate in the hands of consumers. There is also the need to ensure that the investments, suggested in the plan as desirable, be actually made. Not only should the means be at the disposal of those of whom it may be expected that they will effect the capital formation, but there should be a sufficient economic incentive to do so for the purpose in view. This means that the structure of the costs and price system should be such that a margin, acceptable both from an economic and a social point of view, be assured between costs and proceeds. A margin, on one hand, not too high—such as would make for "unsocial" profits and induce to a larger capital formation than might be proper—and on the other hand high enough to leave a reasonable reward for the initiative taken and the risk incurred. The regulations of price control should realise this kind of reasonable margin.

The most evident case in which these conditions are not being complied with yet, is the renting of houses. The difficulty is that the rental of houses existing before the war *could*, without disadvantage to the owner, and therefore *should* be lower than that of houses to be newly built. In order to stimulate the building of new dwellings, the rentals would have to be fixed higher than the tenants generally can afford.

A solution of this difficulty might be sought in a *rent tax* to be imposed on the increase of rental, the yield of such tax providing the means to allow premiums on the building of new houses. Such premiums should be gradually reduced, so that in the end housebuilding would again be unsubsidized. This will be possible when the standard of living will have sufficiently recovered to be able to carry the costs of building which may then be assumed to have fallen again in the meantime.

Global Plan 1946 in Tables ²⁵

BUDGET OF NETHERLAND'S ECONOMY FOR 1946

(in 1000 millions of Glds.; in parentheses figures of National A/cs 1938 ²⁶)I. *Family household (incl. of collective income recipients, etc.)*

<i>Receipts</i>		<i>Expenditure</i>	
a. Productive incomes, paid by enterprises (<i>IIg</i>)	6.1(4.1)	d. Consumption (<i>IIa</i>)	6.3(4.4)
b. do. paid by public authorities (<i>III f</i>)	1.4(0.6)	e. Direct taxes (<i>III a</i>)	1.2(0.4)
c. Transferred incomes (<i>III g</i>)	1.1(0.3)	f. To be saved (<i>IV a</i>)	1.1(0.6)
	<hr/> 8.6(5.0)		<hr/> 8.6(5.0)

II. *Enterprises (incl. of public enterprises)*

<i>Receipts</i>		<i>Expenditure</i>	
a. Supply to family households (<i>I d</i>)	6.3(4.0)	g. Remuneration of productive agents (<i>I a</i> —p. 15)	6.1(4.1)
b. do. to public authorities ²⁷ (<i>III c</i>)	1.6(0.5)	h. Supplies from other enterprises for:	
c. do. to other enterprises (<i>III h</i> 1 + 2)	2.9(1.0)	1. net capital formation (<i>II c</i> —p. 32)	2.0(0.6)
d. Exports (<i>V c</i>) abt.	1.0(1.8)	2. replacements (<i>II c</i> —p. 32)	0.9(0.4)
e. Subsidies paid by public authorities (<i>III h</i>)	0.1(0.1)	i. Imports (<i>V a</i>) abt.	2.8(1.7)
f. Credits (<i>IV c</i>)	1.4(0.3)	j. Indirect taxes (<i>III b</i> —p. 38)	1.1(0.5)
	<hr/> 13.3(7.7)	k. Other payments to public authorities (<i>III c</i>)	0.4(0.4)
			<hr/> 13.3(7.7)

III. *Public authorities (excl. of public enterprises and reconstruction)*

<i>Receipts</i>		<i>Expenditure</i>	
a. Direct taxes (<i>I e</i>)	1.2(0.4)	e. Supplies by enterprises (<i>II b</i>)	1.6(0.5)
b. Indirect taxes (<i>II j</i> —p. 38)	1.1(0.5)	f. Remuneration of productive agents (<i>I b</i>)	1.6(0.6)
c. other payments by enterprises (<i>II k</i>)	0.4(0.4)	g. Transferred incomes (<i>I c</i>)	1.1(0.3)
d. Loans (<i>IV d</i>)	1.5(0.2)	h. Subsidies paid to enterprises (<i>II e</i>)	0.1(0.1)
	<hr/> 4.2(1.5)		<hr/> 4.2(1.5)

²⁵ Graphs appearing in the memorandum have been omitted, as have sections of the Budget.²⁶ After each item, the corresponding opposite item is shown in italics and in parentheses.²⁷ Of which 300 (100) million Glds. replacements.

IV. *Capital market*

<i>Receipts</i>		<i>Expenditure</i>	
a. To be saved by family households (<i>If</i>)	1.1 (0.6)	c. Credits to enterprises (<i>IIf</i>)	1.4 (0.3)
b. Foreign credits (<i>Vd</i>)	1.8 (..)	d. Loans to public authorities (<i>IIId</i>)	1.5 (0.2)
		e. Capital export (<i>Vb</i>)	.. (0.1)
	<hr/> 2.9 (0.6)		<hr/> 2.9 (0.6)

V. *Foreign countries*

<i>Receipts</i>		<i>Expenditure</i>	
a. Imports (<i>IIi</i> —p. 16)	2.8 (1.7)	c. Exports (<i>IIId</i> —p. 18)	1.0 (1.8)
b. Foreign lending (<i>IVc</i>)	.. (0.1)	d. Foreign credits (<i>IVb</i>) (p. 19)	1.8 (..)
	<hr/> 2.8 (1.8)		<hr/> 2.8 (1.8)

Alternate Possibilities

In this paragraph we shall discuss very briefly: (a) A number of alternate possibilities which, though rejected by the C.P.B. on technical grounds, were thought of sufficient importance to be submitted for consideration to the Council of Ministers; (b) A number of alternate possibilities not touched upon in the plan, because it was assumed that they would arouse in this country strong objections of a psychological nature; (c) A number of alternate possibilities which were not rejected by the C.P.B. but of which it was assumed—either on technical grounds or because it was thought better not to be too optimistic—that they could not be realised in 1946.

(a) Among the alternatives, rejected on technical grounds, may be mentioned:

Less power supply and transport. It is only with the utmost exertion that a power supply, adequate to a production level equalling 83 per cent of 1938—the target set for 1946—can be assured. The enlistment of more miners (even Germans and interned Dutch national socialists), American and German imports, and, as an extreme measure, perhaps even the temporary institution of Sunday shifts, will prove necessary to achieve that object. Yet, however heavy the demand to be made upon all agencies concerned, a reduction of the power supply below the level indicated is inadmissible, as it would at once jeopardize one or more of the programs, such as consumption (including accumulated demand), capital formation (including reconstruction and replenishment of stocks), public services (including restoration of our defence

forces). The same may be said of any lag behind the established norm of transport.

The contracting of larger credits or the liquidation of larger amounts of foreign assets. Apart from the question whether this would be possible, it would soon meet the objection that thereby either the burden on Dutch economy of interest and repayment due to foreign creditors would be still further increased, or our income of interests and dividends reduced. In view of our limited transfer capacity, such measures, which could only mean a delay of the necessary clean-up of our economic life, would lead us into a blind alley. The forcing of our exports to cover our increased foreign obligations would necessitate a price reduction of our export products that would surely prove unacceptable, both economically and socially.

Raising the exchange value of the Guilder. When, in the future, foreign borrowing and liquidation of foreign assets may no longer be possible, a heavy pressure on our balance of payments must be expected, the more so since we have largely lost Germany as an export market, and the income from our investments in the Netherlands East Indies is likely to suffer severe reduction. This pressure can only be met by stimulation of our exports, so that a raising the Guilder exchange must be strongly deprecated.

(b) Alternatives, against which probably strong psychological objections will be raised are for instance:

Augmentation of the number of workers. This would imply more or less forced labour, with probably disappointing results. From calculations made, the number of workers could in this way be increased by some 3 per cent at most, especially women, who did not work in normal times. Moreover, the grade of training of such persons would be very low.

Temporary prolongation of working hours. Certain investigations have left the impression that a prolongation of the working day by one hour would result in an increase of total production by about 5 per cent. It is, however, to be expected that such a measure would meet with opposition in labour circles, where the 8 hours' day is regarded as an important fruit of many years' agitation, so that it would rather depress productivity.

Enlistment of foreign labour. This measure may be considered in the mining and building trades (plasterers).

Stimulation of production through profit-sharing and co-partnership or change in wage systems. This subject deserves closed examination. . . .²⁸

²⁸ Under (c), the C.P.B. discusses long-run remedies, e.g., reparations, rationalization; but little help can be expected from these in the near future.

Conclusion

The Global Plan 1946 set out in this memorandum is to be followed as early as possible by a more comprehensive memorandum, giving more details on the subject of production, imports and exports.²⁹

The plan now presented chiefly contains the main features regarding consumption, investments, and public services.

The following conclusions and resulting lines of action call for attention:

Production, Trade, etc.

(1) The national productivity should be developed to its utmost. On one hand, therefore, all frictions and frustrations of whatever kind or origin should be eliminated. On the other hand, positive means should be looked for to increase productivity within the individual concerns and within the economy as a whole.

(2) The plan is based on a coal production which must be raised to an annual average of 28,500 metric tons a day (total in 1946: 8.5 million metric tons).

(3) Imports should be put down at 2,800 million Glds. (including 500 millions for military purposes). Exports, including the balance of services received and rendered, should come to 1,000 millions and be composed as far as possible in accordance with the "foreign exchange productivity" of the exported goods. The difference between imports and exports must be bridged over by foreign credits and liquidation of assets abroad, the present exchange value of the Guilder being maintained.

(4) The traffic apparatus should be repaired in 1946 to 80 per cent of 1938.

(5) The metal industry plant will have to be restored in 1946 to 100 per cent of 1938.

(6) The remaining industry should in the average be restored to that same level within three years.

(7) Stocks in trade and industry can only be replenished to a very limited extent.

(8) The Building Plan should be realised.

(9) Production should be increased by means of:

(a) propaganda for more intensive work

(b) training and re-training of labour

(c) enlistment of more labour (especially in mining industry)

(d) eventual introduction of the more-shifts system in certain industries

²⁹ As mentioned in the preface, this second memorandum has been presented in the meantime to the Government in April last.

- (e) improvement and reparation of the soil
- (f) rationalization and standardization
- (g) research
- (h) removal, as far as possible, of organizational impediments
- (i) transfer of part of the civil servants to private trade and industry

Consumption

(10) The real wages level, guaranteed by the minimum budget, should agree with the productivity of labour.

(11) Eventual further rise of costs of living should be restricted to 85 per cent over the 1938 level.

(12) Public expenditure should be cut down as much as possible.

(13) In an austerity campaign, supported by publication of economic data, the urgent need of the utmost economy should be impressed upon the general public. Saving, too, should be encouraged in every way, if need be by means of a compulsory loan.

(14) The food rations are to be maintained at about the present level.

(15) The fuel rations for domestic use should not exceed 12 units (i.e., 0.9 metric tons) in 1946-47.

(16) Consumption of other non-durable consumers' goods cannot be raised.

(17) Replenishment of inventories of durable consumers' goods by 25 per cent of the arrears against 1938, priority to be given to families having suffered through the war or being newly established.

(18) In allowing advances to families of small means for the purchase of textiles, footwear, furniture, and the like, a maximum of about 50 Glds. per family be adopted for 1946.

France: Planning to Modernize

Introduction

IN 1946-47, the French government issued its *First Plan of Modernization and Equipment (the Monnet Plan)*, which embodied overall plans for the entire economy for the years 1947-50, and mapped the economic plans for 1947 in greater detail. In this chapter, we present the essentials of the plan—objectives, manner of execution, an examination of the crucial variables. Chapters II and IV of the original plan which are omitted here give in considerable detail the manner of modernization, amount of investment, productivity standards, dependence on imports, and degree of mobilization of labor for each of the important industries. These parts also catalogue for each of the vital potential bottlenecks—coal, electricity, devisen (foreign exchange), and labor—the anticipated supply and demand for each of the years 1947 to 1950. In fact, the planners suggest the manner in which supply and demand may be kept in equilibrium. For example, in suggesting how productivity of labor may be increased, and in proposing control of employment, prohibition of sterile fields of employment, increase of hours, and importation of labor. Monnet and his colleagues point the way towards attaining a supply of labor equal to demand.

A higher standard of living and full employment are the ultimate objectives; a rise in productivity through modernization and increase of capital, and improved standards of management are the suggested manner of attaining them.

That France lost heavily as a result of the war; that the French population is likely to be abnormally dependent because it is an aging one, with large numbers of young to be supported as a result of the recent increase in births; that the international position of France had become precarious with the loss of foreign markets, along with her extension of foreign investments and the gains of newly industrialized nations; that her economic position had deteriorated in the inter-war period as a result of large amounts of unemployment—all of these conditions suggested to the Monnet Committee the need for planning, for conservation of resources, for making the best possible use of limited factors, for supplementing domestic supplies with the proceeds of foreign loans. More work, greater productivity of labor, increased use of capital, modernization of plant, concentration on consumption of essentials, a rise of consumption goods sufficient to stamp out absenteeism and throttle the inflationary forces, and an overall plan to assure that first things come first—these were the ingredients out of which the prosperity cocktail was to be concocted.

Controls must be decisive. The government is to direct labor, control foreign exchanges—thus, the imports of goods and their use—regulate the building of new factories, and determine the use of scarce basic resources. In the public domain, it would have complete control, and through its command of distribution of vital materials owned by the state, would be able to influence economic activity directly—nationalization of money is an example of the direct attack. Agreements between government and representatives of the highly concentrated industries on objectives and modes of procedure will be required; along somewhat different lines, co-operation with small business will be necessary.

Like most recent plans, the Monnet Plan is not disposed to allow an inelastic monetary system to interfere with the attainment of objectives. Although it seeks monetary stability as a condition for dishoarding of idle balances and uncovering of foreign assets, it recognizes also the function of monetary expansion in a developing economy. Finance is to be the handmaid of industry. Required financial resources are to be had from internal sources of business and agriculture, from abroad, and from the savings of the public. In order to reach their lofty goals, it will be necessary to provide investments equal to almost one-quarter of the national income. Since personal savings are unlikely to exceed one-tenth of the total income, the importance of supplementary sources (e.g., foreign, business) is evident. Savings, above all, must equal investments; or, to put it another way, the public, through compulsory measures and/or the offer of incentives, should be influenced to spend no more than the equivalent of the flow of consumers' goods at stable prices.

The First Plan for Modernization and Equipment¹

The decree of January 3, 1946, provided for the establishment of a "first overall plan for the modernization and the economic equipment of Metropolitan France and her overseas territories."

This plan, it specified, should have as particular objectives the following:

- (1) The development of national production and foreign trade, especially in the spheres in which the French position is most favorable;
- (2) The increase in the *output* of labor;
- (3) The guarantee of *full employment*;
- (4) A rise in the *standard of living* of the people, and improvement in living standards.

It includes reorganization of stocks of tools and equipment, either public or private, damaged or destroyed as a result of warfare.

This report is presented in execution of this decree, and of complementary instructions from the government.

After summing up the reasons why the French situation makes modernization a vital necessity, and outlining the guiding principles which this situation imposes upon any action we may undertake, this document sets forth the objectives of production, and the measures recommended for modernization from now until 1950, as well as the means of insuring the realization of the plan: material means, investment and financing, methods of execution. It also specifies the program for 1947. . . .

Modernization or Decadence

[The Fundamental Change in the French Situation]

(1) Two wars and a prolonged economic crisis in the interval between them, resulted in our country losing a great part of the accumulated reserves which used to permit it to enjoy a standard of living superior to that warranted by its activity and the output of its labor.

(2) On the eve of the second world conflagration, almost one-third of our capacity for industrial production was unemployed. The spirit of enterprise was weakened to the point where investments scarcely covered the needs of replacement. In agriculture as well as industry, the productivity of labor was, in general, much lower than in countries with up-to-date equipment.

¹ *General Report on the First Plan for Modernization and Equipment, 1946-47*, pp. 5, 9-20, 33-4, 83-95, 99-107. Translated from the French.

In consequence of our lesser efficiency, as well as of unemployment, actual wages and living conditions in France were perceptibly inferior to those which obtained in other countries.

Mediocre as it was, this standard of living was not assured, however, by our current work. To the amount of 20 or 25 per cent, we were paying for purchases abroad with the income from our foreign investments. Thus, we were living on the thrift of former generations.

(3) The recent conflict which has just ended destroyed a part of our material capital, and compels us to liquidate the greater part of our liquid assets of gold and currency.

In the coming years. France will have nothing to live on but the product of her labor. As numerous vital raw materials are lacking on our own soil, we shall even have to export useful commodities in order to obtain the indispensable.

Since the labor of Frenchmen must be their only resource, after the short respite given us by foreign credits and the utilization of our last reserves, in order to avoid a lowering of the standard of living, their effort must be the most efficient possible, that is, each work-hour in France must produce the maximum of agricultural as well as industrial products.

(4) In respect to productivity, France, which even before the war had allowed herself to be outclassed, found herself even more backward as a result of the war.

While destruction, privation, the failure to maintain machinery, and the breaking off of communication with the outside world lowered her output still further, that of other countries steadily increased in a rhythm accelerated by the very demands of the struggle.

Particularly in the United States, an even greater industrial revolution took place than after the last war. Of course, these improvements have had as yet only limited effects on the production of the country, but its advance in capacity is unprecedented.

Lastly, the second World War accelerated to a great degree in the former "new" countries the industrialization set in motion by the first one.

(5) This is why it is absolutely necessary to increase our productivity, and in order to do this to modernize and re-equip our country.

Of course we couldn't aim at bringing productivity up to the exact level of countries where it is the highest in the world, but the margin which separates us from them is only partially the result of natural factors; it is in our power to come perceptibly closed to them. By taking advantage of the technical advances made by these countries, and adapting our activities to our aptitudes, we can place French agriculture and industry on a basis of universal competition, and thus re-establish a lasting equilibrium in our balance of payments, which will correspond

to the facts of our new situation, and furthermore be accompanied by an increasing improvement in living conditions.

(6) Since we are aiming first of all at increasing productivity, the modernization which we must accomplish should not consist solely in renewing production equipment; in many cases, it is the methods which must be modernized possibly by a change in the structure of activities.

Following the example given us by foreign countries, the most intimate exchanges, both in the agricultural as well as the industrial sphere, should be established between scientific research and its practical applications. Were our country itself not to take part in the work of discovery which is going on in the world, its machinery, even though modernized on the basis of current techniques, would again rapidly become obsolete.

In general, a definite concern for increased output should be omnipresent. Modernization is not a condition of material things; it is a state of mind.

[Modernization as the Necessary Road to Recovery]

(7) Such a renovation of our methods and production machinery is not an enterprise which France can take on or renounce as she pleases; it is a necessity the only alternative to which is decadence.

From whatever point of view one considers our recovery, and whatever may be its aspects—and its closely interrelated phases are mentioned in the decree of January 3, 1946, and the complementary instructions of the Government—modernization is our only hope.

Reconstruction

(8) The most obvious necessity for France is to bring about an even more massive work of reconstruction than after the last war.

The struggle of 1939-45 spread its ravages over the entire country: 79 out of 90 departments are classified as badly damaged, and none of the 11 others was entirely spared, while in 1914-18 one-sixth only were devastated. Therefore, a comparison of the balance-sheets for the two wars makes it apparent that this time twice as many buildings were hit.

	<i>War of 1914-18</i>	<i>War of 1939-45</i>
Buildings totally destroyed	368,600	477,200
partially damaged	559,000	1,363,000
Total	<u>927,600</u>	<u>1,840,200</u>

In volume and in value the relative losses are even greater; while the damage done in 1914-18, with the exception of the coal-mines and certain towns in the North, had befallen chiefly rural districts with antiquated houses, the military operations of 1940, and 1944-45, like the aerial bombings, mainly affected thickly settled urban areas.

It is clear that France's economic equilibrium was far more violently thrown off balance by the ruining of a majority of her large centers, and precise bombing of essential industries and lines of communication, than by the blind though limited destruction brought on by the war of position.

(9) At present, the clearing away and removal of mines is almost finished, the partially damaged buildings, to tell the truth the most numerous, can be considered 20 per cent repaired, farm buildings are almost half repaired, industrial structures about 80 per cent, public buildings 90 per cent. and 425,000 families out of a million who were without shelter at the time of liberation have received temporary lodgings—but reconstruction of entirely destroyed real property has only just begun.

(10) It is very evident that in its present condition our production is in no way able to replace without delay all the property destroyed, damaged, or looted in the course of six years of war, four of which were years of occupation—a capital which had been created by labor of several generations.

Even if one were henceforth to appropriate directly the whole or at least the greater part of our available resources to the reconstruction of living-quarters, this reconstruction itself would be thereby impaired. Lacking sufficient production capacity to launch such a building program today on a scale out of proportion to the possibilities would only end in curbing it as early as 1948-49. The result would be delays which cannot be measured accurately, but assuredly they are very long—possibly several decades.

Only by modernizing and developing the construction industry and those which govern its activity (steel, building materials, transportation) can we build more, better, faster, and cheaper houses.

We can thus hope to repair all the damage to real estate in seven or eight years and, at the same time, to enlarge the work of reconstruction in a general policy of extension and renovation of French housing, in the rural districts as well as the cities.

Modernization of the means of production is then the indispensable condition, not only to bring about rapid reconstruction, but also to make up for one of the most serious social deficiencies experienced between the two wars.

(11) This does not mean that reconstruction and modernization must be set against each other; on the contrary, they complement each other in a very great measure.

In order to modernize and develop production, it is indeed indispensable to reconstruct as fast as possible everything which is vital to the economy of the country, particularly all that is necessary to the well-being of the working classes.

On the other hand, the importance of the work conferred on the building industry will be the most effective factor in the modernization of this branch of the economy.

Finally, reconstruction in all spheres must take place according to modern standards, and will thus contribute to the general work of modernization.

Standard of Living

(12) Another fundamental task is to raise continually the living conditions of the general population, first restoring them to their pre-war level, then giving all Frenchmen, thanks to an equitable income distribution, the opportunity to profit from the material advantages enjoyed by the inhabitants of the most progressive countries.

There is, however, only one real way of improving today's low standard of living: that is, to produce more. Even though immigration and lengthening of the work-week may permit us to obtain immediate results, an increase in productivity is by far the most efficient factor in raising long-term production.

Thus the very high living standard in the United States is essentially due to a steadily increasing production of goods and services per working hour. Thus only if every Frenchman, too, produces more with equal effort can everyone's living conditions improve and approach the level of the most advanced nations. This end, in turn, can only be attained if the workers use the most highly perfected machinery and the best methods known.

(13) The technical capacity and diligence of the French workers are in no way inferior to those of foreign workers. But, as the work of the Commissions on Modernization has confirmed, in pre-war France our capital, in the form of agricultural and industrial machinery, has been insufficient, and the organization of production too often archaic, to permit labor as much efficiency and as great an output as in Great Britain or the United States.

Consequently, in the same unit of time, a French worker produced about three times less than an American worker, and one-and-one-half times less than an English worker (such relationships, of course, being averages).

(14) This is why France's real national income per capita, which measures the standard of living, lagged far behind many other countries.

Undoubtedly the table (p. 400) gives an order of size rather than exact figures: it is no less certain, however, that countries with fewer natural resources than ours have nevertheless, succeeded in procuring for themselves a higher level of general well-being.

The examples of New Zealand which enjoyed the highest living standard, of Holland which has no iron ore, of Sweden which has no

REAL INCOME PER CAPITA IN FRANCE AND
ABROAD BEFORE THE WAR ²

<i>Country</i>	<i>Last year known</i>	<i>Income per capita</i> ³
New Zealand	1937	1,702
United States	1937	1,485
Canada	1936	1,352
Great Britain ⁴	1937	1,275
Australia	1937	1,212
Switzerland	1930	1,036
Germany	1937	828
Sweden	1936	804
Norway	1937	705
Denmark	1933	679
Netherlands	1934	662
France	1934	641

coal, of Switzerland and Denmark, which lack both, show that the living standard of a country depends on its technical development, agricultural as well as industrial, and not on its area, the resources of its soil, or its economic power alone.

(15) There are many reasons for this state of affairs. One of the most important is due to the losses France suffered during the first World War, to the military burden, out of all proportion to her strength, which she assumed between 1919 and 1940 as the vanguard of the democracies, to the deep-seated feeling of insecurity from which her population suffered during this period.

The situation was considerably aggravated by the conflict which has just ended. First the destruction, the German demands for money and goods, and the non-renewal of equipment as it wore out lowered our already weak economic potential. The undernourishment of the population and the growth of absenteeism as a consequence of the food shortage also contributed to reducing the output of labor.

Besides, our country, occupied by the Axis Powers, was prevented from taking part in the enormous technical progress which in four years of war enabled our allies to achieve.

(16) France then must modernize and reorganize its production apparatus in order to increase labor productivity, produce more and

² From Colin Clark: *Conditions of Economic Progress* (London, MacMillan and Company, 1940), p. 148.

³ These figures are expressed in international units, the international unit being defined as the amount of goods and services that a dollar would have bought on the average in the United States during the period from 1925 to 1934.

⁴ The difference between Great Britain and France was in reality less than the figures would make it seem: 1937 was a relatively good year for England, while France in 1934 was at the bottom of the depression.

as a result reach a high living standard necessary not only for the well-being of her people, but for her very existence.

The tragic experience of the last seven years has brought home to us the extent to which mortality, especially infant mortality, average length of life, and hence population, depend directly upon the conditions of diet, fuel, housing, and clothing under which that population lives.

Population Development

(17) A country with an aging population, France since 1942 has seen her birth-rate steadily mount, until in 1945, for the first time in a half-century, it surpassed the level needed for the full replacement of the preceding generation.

If this trend continues, the productive age groups, reduced by the war, will moreover have to support an unusual number of aged and children.

For at least twenty years, our country will have to bear, not only the consequences of its former demographic decline which kept the French population at perceptibly below the optimum level, that is, the level which would have permitted everyone to enjoy the maximum well-being, but also the increased load brought on by the reversal of this tendency, and particularly the necessity of training a more numerous younger generation so that its output will be higher later on.

This double obligation would compel either an inordinate effort on the part of those who produce, or a general lowering of the standards of living, unless modernization and an increase in the productivity of labor compensate for the relative reduction in the number of the productive age groups.

No one begrudges the advantages granted to children, young people, and aged workers. Everyone agrees, on the contrary, in wishing that they may be extended; but in order that the effects of this social policy may not be voided by inflation, it is necessary that a rising production, supported by increased capital, should bear the load created by this policy.

Economic Independence

(18) Economic independence doesn't mean autarchy. France could not support herself entirely. Before the war she imported from abroad:

25 million tons of coal, that is, one-third of what we consumed, the exact amount necessary to assure the continuance of our steel industry, of our machine tool industry, our construction material, building and public works industries, which employed 2,600,000 industrial workers out of 7 million;

8 million tons of petroleum products, that is, the tonnage without which our highway and aerial transportation would be completely

stopped, as well as the greater part of our merchant marine and river traffic;

98% of our copper, zinc, and tin, and 65% of our lead requirements;

96% of our cotton (280,000 tons) and 87% of our wool (100,000 tons);

60% of our fats and oils;

54% of our pulp.

The greatest effort must, of course, be made to develop the resources, in Metropolitan France and her territories, of petroleum, wool, fats and oils, etc. But, however much she might wish to, France is unable to produce synthetics and replacement products in any appreciable quantity mainly because of her lack of coal, wood, and manpower.

Our country must have international trade.

(19) Before the war, our exports abroad covered only two-thirds of our imports, and our country only succeeded in covering the chronic deficit in its trade balance because nearly two-thirds of it was made up by the income from her foreign investments, most of which had been made before 1914.

But we have had to liquidate our public holdings of gold and currency, with the exception of the minimum cash-balance necessary to avoid sudden deficiencies in our balance of payments. The mobilization of private assets would give us only a short respite, while their liquidation would also destroy the income they brought us. Thus, within a short period we shall be able to pay for our imports only by means of our exports (the receipts from tourists being only sufficient to meet the expenses of freight and non-commercial payments).

But whatever may be the increase in national production of power and raw materials in the course of the next few years, we shall have to import the more the greater our economic activity.

Moreover, we shall have to provide for the interest charges on foreign loans contracted since the liberation.

(20) Some foreign credits will certainly furnish us at the start the means of balancing our payments abroad.

Already the various loans contracted in the United States, the Canadian credit, the British loan, and the loan under discussion from the International Bank for Reconstruction and Development represent a total sufficient to cover the greater part of the probable deficit from 1946 to 1950, on condition, of course, that the expected exports are made.⁵

These facilities are vital for us; for they permit us to maintain without interruption the flow of supplies of all kinds without which we cannot live, and to import the machinery which our industry is incapable of producing.

⁵ In 1946-47, these hopes were not fulfilled—Ed.

However, while foreign aid is necessary for us until the time when our exports will suffice to cover our imports, and when the income from tourists will again reach the level of the best pre-war years, we must reach that point as soon as possible, in order to avoid a vast indebtedness, which would bring with it the threat of economic slavery.

For France, in her new situation as a debtor country, "economic independence" therefore means exporting enough merchandise to pay for our imports.

(21) If we wish to arrive at this equilibrium necessary for our trade balance, which seems possible about 1950, we must more than double the value of our 1938 exports, and attain that of the best inter-war year, i.e., 1929. Today the world is eager for goods, and buys them even at inflated prices; but this situation, of which unfortunately we are in no position to take full advantage, will not last very long, from 1948 on international competition will probably again be in full force.

In the world of tomorrow, there will be only two means by which any country can export amounts of any consequence: like pre-war Japan, at the cost of starvation wages and a low standard of living for its working-class; or like England, thanks to a relatively modern industrial equipment and a high productivity of labor .

(22) A country like ours could obviously not have recourse to the first of these solutions.

Thus, modernization and equipment of the French economy, so as to enable it to compete internationally is the only possible basis for an increase in our exports without which our production could not develop.

This is even more true since, contrary to general opinion, our luxury exports, for which price is a lesser consideration, play only a secondary role in our foreign exchange. In 1938, they represented only 10% of the total value of our exports.

Our great export industries, particularly textiles and machinery and related manufactures, must bring their production costs down to the world level. An increase in the productivity of labor is the only way of accomplishing this while at the same time steadily raising real wages.

(23) There is a further condition scarcely less important: that foreign markets be open to our products. The disappearance of trade barriers is a matter of prime importance to France.

(24) Another world economic depression would certainly affect the levels of domestic production, employment, and consumption.

This interrelation of our economy with world markets is the inevitable risk run by economies that are not self-sufficient, and the corollary of a high living-standard based on the development of exchange with other countries.

But if a depression is not inconceivable, none of the aggravating factors which made that of 1929 a world-wide one exist today—in par-

ticular, a huge mass of foreign and domestic debts. Besides, public opinion would compel the governments to take rapid action toward re-establishing full employment of manpower and of production capacity, an action they should be able to take, thanks to the experience of the last fifteen years.

At any rate, whatever may be the fate of the international conversations now in progress about commercial policy and employment, whatever situation France may have to face, our country will the better adapt itself to all circumstances if it will have a modern economy based on low operating costs inciting it to expansion, rather than one based on reactionary Malthusian tenets.

Security

(25) Finally, one of the justifications for modernization will be to strengthen our military security.

The recent war confirmed, if there was need for it, that with the intensive mechanization of modern armies, the true measure of a country's war potential is henceforth the degree of development of its heavy industry, particularly steel and heavy machinery.

The example of the United States and of the U.S.S.R. shows that the conditions necessary for modern military equipment are: increase in industrial potential, modernization of the economy, and the development of scientific research.

Today, the only way for us to have a really powerful army is to create the industry without which there would be only an illusion of security. Only by producing more steel, more machine tools, agricultural equipment, textile machinery, etc., shall we be prepared, if one day it should again be needed, to manufacture more guns, tanks, machine guns, etc. Only an industry with a great capacity of metal production and processing will permit us to play our part in the international organization for collective security now being set up by the United Nations.

Besides, at present it is not advisable to have industry produce armament in great quantities, due to the uncertainty that exists with respect to the nature of the new weapons.

A premature effort would risk compromising the modernization program by diverting from it, fruitlessly, our resources of manpower, energy, steel, etc., which are indispensable to its realization.

(26) In a first period, then, and in a measure compatible with our obligations in Germany, as well as the maintenance of peace in our overseas territories, it is important that our military expenses, both in men and in money, be fixed so as not to hinder the accomplishment of the great task of modernization, which is the condition for rebuilding

France in all spheres. For in order to accomplish this, we shall require all the manpower, coal, and steel available.

These substantial savings, while allowing us to keep an army adapted to the current international situation, would, by the development of heavy industry as planned, contribute to the eventual reinforcement of this army and of our military power.

There Is No Choice for France

(27) Thus, every one of these fundamental tasks suggests the need for renewing our equipment and methods.

It would be self-deception to think that France could do without this effort, and return to the mediocre position she held before the war.

The alternative to modernization is not a return to our former position, but steadily aggravated material decay.

(28) As a result of the capital losses suffered on account of the war, our output would be lower than before.

Within the country, more work-hours would be necessary to produce the same amount of goods and services. The population would either have to work longer hours, *and this permanently*, or see its living conditions grow considerably worse, while other countries would continue to advance along the road to well-being.

Compared to the rest of the world, our production would be hampered by steadily rising production costs relative to those of our competitors, and our products would tend to be squeezed out of world markets.

(29) Another factor would make our position even more serious. The active population of France in the productive age groups has decreased by about a million and a half since 1938. These losses, insofar as they are due to the aging of the population, and to the fact of war and occupation, are total losses. The others, particularly those which result from inflated administration and distribution, might, if proper action were taken, be considered at least in part, as temporary only.

There remains the fact that the working population of France is noticeably smaller and older than in 1938.

This is especially true in the field of agriculture, and unless the steady reduction in the number of workers, which might be speeded up shortly by the departure of our prisoners of war, is alleviated by mechanization and an increase in output, it would inevitably result in a reduction of output estimated at 10% of the pre-war average. The decline would be immediate, and even greater in the case of certain essential commodities, particularly grain and milk; furthermore, it would be getting continually worse every year as the rural population gradually moves to the city. Instead of our trade balance for food being in equi-

librium, as before the war, we would be reduced to importing the very necessities of life.

We should also, however, be able to continue importing the raw materials currently needed by our industry. But without modernization we would be able to export less and less, therefore import less and less, hence produce less and less, and thus export less again; and so forth. Trapped in this vicious circle, our industry would be threatened with ultimate asphyxiation.

The only means, then, of developing our exports would be either to reduce wages or devalue the franc again. We should then place ourselves in the position of having to exchange a larger amount of French labor for a lesser amount of foreign labor, perhaps four or five hours of French work for one hour of American work; this is exactly what happens to countries that are not highly mechanised and whose efficiency is low, in their trade with more highly-developed countries.

(30) Doubtless a reaction would set in sooner or later against such a lowering of standards of living, and it could only be in the direction of modernization and re-equipment; but this program would then be entered upon under much more difficult conditions, and would impose extremely severe and prolonged hardships upon the people.

(31) To conclude, it cannot be said that France has any choice: there is no choice for her, except between gradual decadence and immediate action.

The only way open to us is the road to modernization and re-equipment; the only question is how rapidly we can enter upon this program.

The Necessity for Immediate Action

(32) While French industrial production has not yet reached its pre-war level, output in other large countries is far above that level, in spite of difficulties and slowness of reconversion:

THE EVOLUTION OF INDUSTRIAL PRODUCTION IN FRANCE AND
ABROAD SINCE THE END OF THE LAST WAR ⁶
(Index: 1938 = 100)

Country	1929	1938	1945		1946						
			1st Half	2nd half	Jan.	Feb.	Mar.	Apr.	May	June	July
United States	131	110	258	250	180	170	189	185	179	196	196
Canada	111	100	271	269	202	196	207	206	197	186	189
Sweden	66	100	79	107	110	111	112	113	113	112	110
France	125	100	37	60	65	72	74	80	84	86	(78)

⁶ From *Yearbook and Statistical Bulletin of the League of Nations and Mouvement économique, 1929-1939, of the S.G.F.*

(33) On the other hand, all changes brought about by the war re-open the question of positions acquired by the different nations and their economic relationships. In consequence, the world has entered upon a decisive phase, in which all the vital elements will be readjusted for a long time to come: relation of creditor and debtor nations, distribution of natural resources, flow of commercial trade, as a consequence of production capacities and manufacturing costs. Because of the resulting changes competition between nations will develop at a more rapid and exacting rate.

The future of all competing countries depends on the manner in which they will respond to the situation, whether by a positive choice or passive resignation. For all progress prepares for, and gives rise to, further progress, while stagnation tends to develop into ultimate decay.

(34) An immediate decision is particularly urgent for France; our present situation leaves no further margin for inaction, nor for continuing to consume without producing.

Either France will be left behind, and will then slip gradually to lower and lower standards of living and economic capacity; or she will immediately make the necessary effort, and will rapidly win back her proper place in world production and trade.

Even if, in the course of putting the plan into operation, adjustments may have to be made, at least the direction we must take is clear. The most important thing, and it is a matter of immediate importance, is to "make the bus." . . .

The Object and Scope of the Plan ⁷

The plan for modernization and equipment from 1947 to 1950, closely examined by the Council, has as its main objectives:

to assure a rapid rise in living conditions of the population, and particularly an improvement in their diet;

to modernize and re-equip the basic industries (coal-mining, electric power, iron, cement, farm machinery, and transportation);

to bring agricultural methods and machinery up to date;

to devote to reconstruction the maximum of resources possible, keeping in mind the needs of the basic industries, and to modernize the construction-material trades, the building-trades, and public works;

to modernize and develop the export industries so as to assure equilibrium in the balance of payments in 1950.

The starting point will then be established for undertaking, as a second stage, a complete transformation of living conditions, especially housing.

⁷ Introduction to Ch. III "Objectives of Production and Modernization Measures"). Ch. II on "Principles of the Plan" is omitted.

The scope of the plan presented consists:

in establishing objectives of production or economic activity for 1950 for the principal branches of our economy, including reconstruction; (The objectives of this first plan essentially take into account the limits set by the resources that can be made available from now until 1950).

in adopting at once programs for production and modernization for each of the years, 1947, 1948, 1949, 1950, for the six basic industries: coal-mining, electric power, steel, cement, farm machinery, and internal transportation, and setting them in motion immediately for the whole period, allocating at once the necessary resources;

in following up or engaging in the different operations necessary, whether in France or abroad, with a view to providing us in the next few years with the essential resources (power, ferrous metals, currency, manpower) in sufficient quantities to reach our objectives in 1950;

in determining in time, each year for the following year, (as now planned for 1947) the *annual program* for production, modernization reconstruction, capital investments, imports, etc. These programs, established in the framework of the objectives fixed for 1950, depend upon material resources, the availability of which can be forecast within probability, on the basis of the progress of the basic programs; the results obtained in assuring us of the necessary amount of resources common to all activities; the results, as well as the progress, of modernization and productivity in different fields;

in applying methods which will permit continued elaboration of the plan, and its adaptation to circumstances, as well as methods which will assure its execution. These methods should be based on those adopted for the establishment of the proposals made in the present report: such a group project requires constant group organization and consultation. . . .

Investment and Financing ⁸

(1) The objectives and the measures proposed for the various areas to be modernized do not only call for a certain number of common material resources.

Although modernization, in the very large measure in which it must consist in improving methods, costs nothing, each of the specific plans analyzed in Chapter III implies capital expenditures for the purchase and setting up of machinery, and for the carrying on of the necessary new construction and for civil engineering.

The fulfillment of the plan as a whole presupposes, therefore, that

⁸ The major part of Ch. III, "Production Objectives and Measures of Modernization," is omitted, as is all of Ch. IV ("Material Means of Realizing the Plan").

the industries, public as well as private, which will have to disburse these expenses, will have the financial means to do so. In other words, will there be enough money to bring the plan to a successful conclusion?

Before giving an answer, it is very important to understand in what way the question of the financing of the plan and of its possibilities poses itself.

The Need for and Possibilities of Capital Investments

(2) There are two preliminary statements to be made: on the one hand, the requirements for modernization itself constitute only a small part of the total investments that must be made in any case; and on the other hand, a limit of possible investments is set by the available tangible assets—that is, mainly by current production.

As we know, France today finds herself faced with the necessity of making huge capital investments. These requirements are, for the most part, the direct and unavoidable result of the destruction, devastation, and lack of maintenance caused by the war. They have been imposed on us since the liberation, and have nothing to do with modernization. Moreover, the development of urban areas and the housing shortage had created, even before the war, an enormous demand for capital investments, which even then was not satisfied, and which since then has increased further.

(3) While the will to modernize brings first a surplus of expenditures, these expenditures are relatively small. And modernization will enable us in the end to accomplish more rapidly, and at less costs, the work not only of reconstruction, but of construction which faces our country.

Limited as they may be, the capital investments necessary to the modernization of the essential factors of national economic activity play an important role. They constitute the lever which by itself can raise the entire mass.

(4) It is difficult, and rather useless, to attempt to calculate the total demand for capital investments which we face. For they will take a great many years, in the course of which technical advances, shifts in population, and the evolution of the general situation will necessitate modifying the figures of the estimate, since they will all have their bearing on the demand for them as well as on their costs.

On the other hand, there is some sense in our proceeding to an estimate of the part of these needs which we will be able to satisfy between now and 1950. This total is, in fact, the maximum of capital goods that we can count on obtaining during this period, by making the best allocation of our resources, on the as yet limited increase of power, ferrous metals, currency, and manpower.

Whether produced or imported, the means to pay for them must

come from current national production, either directly, or indirectly by exporting and thus paying for purchases abroad. However important they may be, only a limited amount can be furnished by foreign credits and the utilization of hidden reserves established in France because of lack of confidence in the national currency.

No financial operating technique can increase, by any means but these, a nation's available funds; credit cannot accomplish miracles.

As analysis shows, there is a physical limit to the maximum of investments that can be made.

(5) The existence of this physical limit makes it necessary to take an overall view of the investments of all kinds that the French can make between now and 1950, both in order to measure their total volume, and to apportion them in the manner that will best further the national interest.

As a matter of fact, if we calculate the total amount of capital goods that we can count on producing or importing on the basis of the objectives, priorities, and methods of modernization heretofore explained, the maximum of investments that we can roughly count on realizing from now until 1950 is in the vicinity of 3,000,000,000,000 francs (according to an estimate made in June 1946).

From this amount we must first deduct the minimum necessary to resume current maintenance of existing equipment and buildings, and to put an end to their deterioration.

Investments in new equipment, including the rebuilding of homes destroyed, will apparently amount to about 2,250,000,000,000, almost half of it equipment, the rest buildings and public works.

Of this disposable total, modernizing the essential parts of our economy, increasing their capacity—which assures the development of production and thus makes all these investments possible, as well as pointing up the importance of further investments, would require only about 720,000,000,000 francs from now until 1950, according to the report of the Commissions on Modernization, and supplementary estimates.

Principal beneficiaries of this money are agriculture, which accounts for 270,000,000,000 francs (for tractors and farm machinery), and power, which accounts for 174,000,000,000 francs (for dams).

There remain then 1,530,000,000,000 francs worth of capital goods to be used to repair a part of the war damage, apportioning 1,100,000,000,000 francs for reconstruction, and 430,000,000,000 francs for deferred maintenance.

Not only do modernization investments represent only one-third of the total of anticipated new investments, but without them it would not be possible to accomplish the remainder.

No recovery is possible unless these investments are made. The other investments would then use up more resources, material as well as finan-

cial, while production would be lower. What modernization will save for us, between now and 1950, in the form of raw materials, power, and labor—although it cannot be figured exactly—certainly makes up to a great extent for the additional expenditures that it seems to entail.

(6) The following table⁹ gives the proposed analysis of new capital investments from 1947 to 1950:

ESTIMATE OF CAPITAL INVESTMENTS TO BE REALIZED
BETWEEN 1947 AND 1950

Evaluation Made in June 1946 (in billions of francs)

	<i>Recon- struc- tion</i>	<i>Main- tenance deferred because of the war</i>	<i>Mod- erniza- tion and In- crease in Ca- pacity</i>	<i>Total</i>	<i>Breakdown into</i>	
					<i>Build- ings & Public Works</i>	<i>Raw Ma- terials and Instal- lation</i>
I. Basic Activities						
Coal mining	3	30	23.5	56.5	33	23.5
Power	4	20	174	198	98	100
Steel industry	4	10	19	33	9	24
Cement industry	3	10	5.5	18.5	7	11.5
Agricultural machinery	...	...	7	7	1	6
Transportation	116	80	27	223	75	148
Sub-totals	130	150	256	536	223	313
II. Other Activities						
Agriculture	30	50	270	350	60	290
Housing: Reconstruction and new homes	610	...	50	660	660	...
Industry and commerce	110	150	80	340	76	264
Transportation and com- munications	190	60	40	290	120	170
Other investments	30	20	30	80	70	10
Sub-totals	970	280	470	1,720	986	734
Grand Totals (in round figures)	1,100	430	720	2,250	1,210	1,040

⁹ The figures given in this table do not include ordinary maintenance, as it is a production expenditure. They were established by the Commission on Modernization for each branch of industry in which one has been formed. In the fields of activity for which no Commission has been formed, the figures given represent only provisional estimates. The program for social equipment (hospitals, schools, day-nurseries, etc.) has not yet been established. Expenditures for this category

The Problem of Financing the Plan

(7) This huge amount of investments, which can be realized with the limited resources at our disposal (and which must be made in order that we may reach the projected objectives of reconstruction, raising of the living standard, equilibrium in our balance of payments, and national security) can be realized—and this is the real problem of financing the plan—only if there is agreement between the planned utilization of material resources, and the use which the population makes of its income.

If consumption—which, according to the plan, is to increase steadily during the coming years—were to increase more rapidly than foreseen, it would absorb a part of the resources to be devoted to capital investments. Then we should have to choose between, on the one hand, slowing down execution of the plan—or even giving it up altogether—or, on the other hand, maintaining the country in a state of inflation which would no less certainly compromise the task of reconstruction and modernization, since then all prediction and calculations would be impossible.

If, on the other hand, producers were to allot a large part of their income to investments that are less useful than those outlined in the plan, e.g., investments in luxury-trades, there would be a diversion of funds to the detriment of reconstruction and modernization, and the above-mentioned predicament would inevitably ensue.

(8) The execution of the plan presupposes then that the French will make no attempts to consume more products and services than can be placed at their disposal, taking into account what is necessary for capital investments. Or, in other words, the condition for its success is that the French, whose income exceeds the needs of consumption, save an amount corresponding to the value of the planned capital investments.

The execution of the plan also demands the postponement of investments in luxury-trades, and even investments which are useful but less so than those outlined in the plan.

are included in "other investments," and have not so far been isolated except for the year 1947.

To conclude, the table does not include:

military outlay, as it cannot be established until the Parliament and the government agree upon a policy of national defense, and which at this time, when production is precluded by uncertainty about the nature of future weapons, should be paid out of the budget for current expenses, to be raised by taxes. Allotments of raw materials have been provided for in the budget for ferrous metals;

nor investments in our overseas possessions, on the one hand because the work on the plan of modernization of these possessions has not progressed far enough; on the other hand, and this is the main reason, because the equipment of North Africa, Indo-China, and other countries belonging to the French Union, in very large part calls upon local resources, and these are not included in the materials and manpower balance-sheet.

(9) The interrelation between the three items, production, income, and expenditures, is basic, since upon it depends the equilibrium or disequilibrium of our whole economy; and it is in this particular framework that we must visualize the financial possibility of carrying out the plan.

All large nations today base their budgetary and economic policies on the concept of national income; the United States since before the war; the United Kingdom, whose Treasury issues with each budget a "White Paper" on the national income; the Soviet Union, which uses it to compare the provisions and the results of its five-year plans.

The Importance of Capital Investments in the National Income

(10) In order to find out whether the savings effort—in the broadest sense of the word—required from now to 1950 is excessive, a rough calculation of the *national income*, defined as the value of the grand total of goods and services at the disposal of the French people in the course of the year under consideration, has been made for the years 1929, 1938, and 1946, as well as for 1947 and 1950, on the basis of the plan, breaking down the national income into consumer goods and capital goods. The figures thus obtained permit us to state exactly the relationships which should exist between consumption and investment, as well as between different categories of consumption and investment.

The national income anticipated for 1947 has been provisionally estimated at about 3,000,000,000,000 francs, and that for 1950 at about 3,700,000,000,000 francs, while the available assets in capital goods should amount to 675,000,000,000 francs and 915,000,000,000 francs, respectively.

(11) The share of capital investments, including maintenance, in the next years should then be about 23 to 25% of national income.

This proportion does not mean that an appeal for savings on the capital markets should net amounts corresponding to 23 to 25% of distributed income. What is meant is the relationship between the value of the production of capital goods, and the value of the national product as a whole. As we shall see later on, the corresponding financial means arise from numerous sources; savings ready to be invested on the capital and money market is one of the most important, but by no means the only source. For 1947, a year for which it is possible to make reasonable estimates, the share required from this form of savings would not exceed 8 or 9% of the distributed income, a proportion already reached before the war.

This great effort to make capital investments, which, by the way, is no more than the concrete expression of the declared principle of the equality and solidarity of all Frenchmen with respect to the costs of the war, does not seem out of proportion to the country's capacity. Already

in 1946, in spite of all sorts of difficulties, 19% of the national income was devoted to capital investments (as compared to 15% in 1938, and 20% in 1929). From now until 1950, these funds will steadily increase, thanks to the very execution of the plan; and this will enable our national economy to put forth the required effort more easily, for, at the same time, it will bring about a steady improvement in living conditions.

The Rising Level of Consumption Corresponding to the Execution of the Plan

(12) The development of capital investments, and that of consumption, are not much as we might be tempted to believe it, conflicting alternatives between which we must choose. Each is a necessary complement to the other; increased consumption, and hence production, demands capital investments, which must necessarily come first. Hence, during an initial period of time, measures must be taken to maintain the increase in consumption within limits compatible with the necessary increase in exports and in production of capital goods. But, on the other hand, the reasonable satisfaction of normal needs is the decisive means of effectively stabilizing prices, restoring the efficiency of labor, and re-balancing the budget, by reintegrating the sum total of transactions into the fiscal system, and making possible the development of savings.

We must see to it that production rises more rapidly than consumption, in order to free a large enough margin to invest and export more than before the war.

As a matter of fact, estimates of the national income obtained on the basis of the objectives of the plan show, as has been said before, that consumption must rise steadily in order to be higher in 1950 than in 1929, the best inter-war year, which, by the way, implies a parallel rise in real purchasing power of the consumers, particularly salaried workers. But the rate of increase of consumption will vary with the products, since in different fields competition varies between the needs of domestic consumption, the necessity for export, and the accumulation of capital.

(13) Thus, as a general rule, there is no direct conflict in the matter of food.

Improvement in the food situation depends solely on the time when agricultural production will attain and exceed its pre-war level. It is the aim of capital investments in agriculture provided for in the plan to accomplish this within the shortest possible time. The priority granted to agriculture and to the industries manufacturing the materials and machinery necessary to agriculture—at constantly reduced prices as modernization progresses—should facilitate its rapid recovery, provided, of course, that whether conditions are favorable. The 1938 level of consumption should be reached in 1948 or 1949, and exceeded in 1950.

Then, too, a normal food supply is the only way to bring back to productive labor those who have been diverted from it by the lure of huge profits on the black market, and to put an end to the absenteeism brought about by the difficulties of getting food.

As to production of other non-durable goods, the per-family consumption of electricity and gas already exceeds the pre-war level. An increase in the availability of coal should permit these industries to supply domestic consumers in 1948 with quantities in the neighborhood of those amounts consumed in 1938.

(14) Competition between consumption and exports is greater in the case of semi-durable products, especially textiles. It must be solved by a broad program for the manufacture of socially useful articles for domestic consumption. A rise in textile production, even taking into account an increase in exports, should towards 1947 and 1948 permit return to the level of pre-war consumption of wool and cotton, respectively. For synthetics, the 1938 figures—admittedly very low—will be largely surpassed by 1947. It will still be several years, however, before our people again have their traditional wardrobe.

It is in the realm of housing and durable consumers' goods such as automobiles, household appliances, and the other elements of modern comfort that the competition with capital investments and exports is keenest; in the sphere of mechanical construction and building the effort either to export or to make capital investments should be greatest. Besides, it is the same savers who decide between productive capital investments and the purchase of durable consumers' goods. For all these goods, the carrying out of the plan for modernization is the preliminary condition, the *sine qua non* of mass production.

(15) Thus, while devoting to capital investments the portion of national production which the plan demands, the French should be able to regain their 1938 purchasing power for all essential consumption goods sometime between 1947 and 1949. By 1950, their standard of living, except for housing, should be definitely above the pre-war level.

However, this improvement in living conditions, as well as subsequent progress, can only be obtained by a change in the bases of production, the indispensable preliminary to a transformation in living conditions.

The country must be brought face to face with its responsibilities: if that part of the population whose income exceeds the consumption envisaged under the plan fails to make the saving effort recognized as possible for the necessary productive investments, that is, were this section of the population to devote to consumption expenditures an excessive part of its income; or if an equally disproportionate part of the national income were given over to non-productive capital investments such as armaments, not only would we obtain none of the results which

we expected thus to obtain rapidly, but we would dissipate the last reserves of a debtor economy in temporary facilities, and we would condemn our country to ultimate impoverishment and enfeeblement, in exchange for the illusion of improved conditions.

The future of the French people then is in their own hands, and on them depends the reality of financing the plan, and hence the plan itself.

Ways in Which the Capital Investments Anticipated by the Plan Can Be Financed

(16) If the French want to, that is, if they limit their consumption to what is permitted by the optimum utilization of our resources, and if they refuse to invest in luxury-trades, or to make unnecessary investments, the necessary capital for financing the plan can be found in various ways: an increase in long-term deposits in savings and other banks, a growth in funds of insurance companies and savings banks, direct subscriptions to issue of securities and of government bonds, hoarded wealth, undistributed profits to provide funds for equipment, like the Rural Collective Equipment Fund, and possibly the surplus of taxes over expenditures of the central and local governments, etc.

The importance of each of these and the call to be made upon them depend in great measure on the price-level, on the apportionment of distributed income, and on general economic and monetary prospects, which cannot possibly be determined for the years 1948-50. At this time, we can only make this study for 1947.

(17) But even though it is useless to try to figure out now the possibility of savings up to 1950, it is possible to air some expectations; and it is useful to state a few general rules for the accumulation and use of the principal means of financing.

(a) There is no doubt that farmers' savings—once they will no longer be required to make up the deficit in public finance, and as soon as the farmers will be offered tractors, motors, etc., necessary to modernize their equipment—will gravitate, of their own accord, toward the productive investments which are of particular interest to them.

In farmers, the desire to invest creates a taste for saving, and with confidence in the nation's currency re-established, their capacity to finance themselves will be increased by the savings that they have hoarded up to the present. Agricultural investments will also be facilitated by existing establishments like the *Credit Agricole*, or by new ones like the *Fonds Collectif d'Equipment Rural*, whose establishment is recommended on the basis of conclusions reached by the Commission on Agricultural Modernization.

(18) (b) A large part of industrial capital investments will be furnished, as in the past, by the liquid assets of the firms themselves. Of course, there should be included in the price, and therefore borne

by the consumer, only the amounts necessary for the normal replacement of existing machinery, and to pay the interest and amortization on loans contracted for expansion and modernization.

The same principles should be applied to firms taken over by government.

Moreover, many private firms have reserves accumulated in the past which will permit them to finance new projects without recourse to credit.

(19) (c) As for the portion of capital investments which is the responsibility of the state, that is, for its own equipment as well as for indemnity for war damage for which it is liable, a sizeable contribution will be furnished by the equivalent in francs or foreign credits, and the public holdings in gold and currency which will be requisitioned. It is essential that these assets, which originate in capital resources, should not be used to meet current expenses, but be ultimately reconverted into capital goods. As for the payments in francs made to the owners of requisitioned foreign assets, it is not unreasonable to expect these owners to re-invest most of the money.

(20) (d) Private and government-owned enterprises, as well as the state and the financial institutions acting under its authority will, as in the past, call for the savings of individuals on the regular market.

It will be necessary to follow a policy of lower interest-rates, and particularly of differentiation of interest rates according to the use made of private funds. This policy, along with the control of issues of transferable securities, will permit channeling of capital investments and savings by the state.

There is no possible way of foretelling the amount that may be found by direct appeal to the market. There certainly exist at present very large reserves that remain idle because of lack of confidence in the nation's currency.

The plan, like any enterprise carried on over a long period of time, can only be conceived of in a state of at least relative equilibrium and stability of currency and prices. Otherwise, the French will neither save nor invest.

Future savers will then prefer, as is now the case, to keep on hand either excessive stocks of goods, or abnormally large amounts of cash ready at the first favorable opportunity to purchase durable consumers' goods or securities of stable value, or even to export their capital in as large quantities as the inevitable gaps in exchange control will permit.

(21) As a last resort, recourse must be had to banks, especially in the initial phase, in order to insure that the plan will get off to a good start, and that no temporary tightening of the capital market will hinder its execution; and to keep close watch over the formation and particularly the investment of savings.

One of the technical procedures for achieving credit expansion already exists in France, since the *Crédit National* is empowered to expand rapidly its medium-term operations.

Credit expansion, by the way, is a normal and healthy method of financing, as long as its natural limits are respected. These limits are:

that the volume of banking credits set aside for the purchase of equipment, plus the other means of financing, shall not exceed the volume of material resources available each year for capital investments: this demands perfect co-ordination between the execution of the plan and credit policy;

that credits should be granted not to finance excessive stockpiles, but to finance capital investments, and these should be profitable not only to the firms which issue them, but for the economy as a whole. That is, that the realization of the plan and the increase in output—lowering of real costs of production—must control the distribution of credit, furnishing a criterion for the banker in examining investment programs submitted to him by various firms.

We must then not discard, but on the contrary reinforce this traditional and efficient means of economic control constituted by the close examination which a request for credit entails.

Even in an entirely planned economy like that of the USSR, it has been recognized as necessary to use the granting of credit as the most efficient means of economic control, and the banks have been given appropriate independence and responsibility to this effect. This is what is called in the USSR "control of the plan by the ruble."

Lastly, it is necessary that credit be consolidated as soon as possible by real savings.

(22) Whether we deal with the resources of the farmers and business firms, or make an appeal to the money or credit market, the financing of the plan, like the financing of any investment program under whatever economic system, fundamentally depends on savings.

But these savings will not be created, nor will they be invested productively, unless one preliminary condition is fulfilled—the balancing of the nation's current budget.

The Fundamental Condition for Financing the Plan: the Balancing of the Nation's Budget for Current Expenses

(23) The balancing of the state's current budget, of the budget for the state-owned but autonomous enterprises, and of local communities is the *sine qua non* for the re-establishment of confidence in the nation's currency, and consequently of the stabilization of prices and the releasing for sale of goods now being withheld from the markets by the producers. Always of prime importance, this balance between public receipts and expenditures is rendered even more necessary by the great

effort for reconstruction and modernization that France will have to achieve. The deficit in public finances leads to a current consumption of financial resources, both financial and material (capital, foreign exchange, raw materials, manpower, transportation, etc.) which are indispensable to the provision of equipment.

(24) A strong effort of will and organization should be enable us to attain even by 1947 a double result:

(a) putting in order the accounts of the state, so that we may clearly distinguish between: on the one hand, the expenses for reconstruction and productive capital investments normally covered by credits and savings (this is why, as has already been said, the expenses for equipment which are the responsibility of the state, have been included in the program of capital investment planned for 1947-50); on the other hand, all other expenditures, including the military ones which ought to be covered by current receipts.

(b) strict equilibrium of the current budget without recourse to credit.

The real value of the deficit has decreased, as shown in the following table, in which the receipts and expenditures of the state in 1943, 1945, and 1946 have been calculated on the basis of 1938 prices.

STATE EXPENDITURES AND RECEIPTS IN 1943, 1945, AND 1946

Calculated on the Basis of Prices in 1938 (in billions of francs) ¹⁰

	1938	1943	1945	1946
I. Ordinary and extraordinary expenditures (Budget ¹¹ and Treasury)	103.2	185	152.7	94
II. Budgetary receipts	54.6	51.5	59	59.5
III. Deficit	48.6	133.5	93.7	34.5
IV. Civil expenses for equipment and reconstruction	3.1	2.3	3.7	26.5
V. Remainder to be covered by Treasury funds	51.7	135.8	97.4	61

The fact remains that the balancing of the current budget expenses for 1947 will demand considerable effort. It presupposes, particularly, that public authorities grant to nationalized enterprises the means of

¹⁰ The figures for 1943, 1945, and 1946 have been made comparable to those for 1938 by dividing them by the average index of the total of official wholesale prices in the year under consideration, which are (on the basis of 100 for 1938):

—234 in 1943;

—375 in 1945;

—625 in 1946.

¹¹ According to credits granted and not actual expenditures.

balancing their operational budget, or, if this is not feasible, that during a period of re-adaptation they contribute to this balance by subsidies written into the current budget, and therefore covered by taxes.

(25) But there is no alternative: unless this effort is successfully completed, not only will the execution of the plan be difficult, but any attempt at carrying it out would become dangerous. Expansion of private credits, in conjunction with advances made to the Treasury by the Bank of France would bring on inflation, and precipitate the collapse of the currency.

The Financing of Investments Planned for 1947

(26) Only at the moment when we are elaborating each annual portion of the plan can we calculate for the coming year at the same time the expenditures for capital investment which for the period 1947-50 have only been estimated in order of magnitude—except for the basic industries; and the means of financing by evaluating the resources anticipated by each method of financing.

Comparison of the two estimates should enable us to adapt the program desired to the program that is feasible without inflation.

(27) For 1947, *the total of investments of all kinds* in metropolitan France—including thus the reparations for war damage to real estate—which are consistent with availability of raw materials, amounts to around 440 billion (estimated on the basis of prices in June 1946).

Details as to fields and items are given in the table below.¹²

(28) The estimate of what we can expect in 1947 from different financial sources is, of course, subject to a margin of error.

The results of *the first half of 1946* were as follows: 20 to 25 billion from the reserves of private persons and enterprises; 80 billion from the exchange into francs of foreign credits and public holdings in gold and currency (170 billion anticipated for the whole year); 83 billion from the financial and monetary markets; thus, for the half-year, a total of 180 to 185 billion.

If we take into account the development of production, especially of key resources, provided for in the program for 1947, it seems that it would not be unreasonable to hope to finance 460 billion¹³ in capital investments, counting on: 70 billion from resources in agriculture and industry; 140 to 150 billion from the exchange into francs of foreign credits and public holdings in gold and currency according to the estimates of the Minister of Finance; 240 to 250 billions will then have to be provided through private savings.

¹² Omitted here.

¹³ Investments in Metropolitan France amount to about 440 billion. To this must be added about 20 billion representing investments in our overseas possessions which must be financed by savings in France.

(29) This last figure corresponds approximately to 9% of income payments for 1947, estimated at 2,700 billions on the basis of production forecast under the plan, of the price level in June 1946, and on the supposition that the current budget is balanced. This proportion is about equal to that reached in 1938 (8%) when there was not a high level of economic activity, currency was unstable, and a world depression threatened.

We must mention, moreover, as has already been stressed above, that the appeal to new savings, that is, those accumulated in 1947, will be reduced in large measure, if the French can regain confidence in their national currency, by the contribution of sizeable savings of the past, which now are not invested but hoarded in the form of abnormally large quantities of notes, gold, or foreign exchange, or as excessive inventories.

If these accumulated savings were invested, recourse to credit expansion in 1947 should be relatively low.

One can see, therefore, that the current budget must be balanced by 1947, so that the old savings will be invested thanks to a return to confidence in the stability of the franc, for which the budgetary balance is a prerequisite, and in order that savings available for investment be utilized for productive ends.

About 220 billion out of the 460 billion for the 1947 program relate to the expenditures for equipment and for reconstruction borne by the state.

(30) The methods according to which these means of financing will be utilized will have to be determined by the appropriate institutions, especially by the *Conseil National du Cr dit*. . . .

Methods of Carrying Out the Plan

Introductory

(1) The decree of January 3, 1946, creating the *Conseil du Plan* endowed the Council with the responsibility of proposing to the government the ways and means of assuring its execution.

The plan is for France a new kind of enterprise, which demands new methods of consultation and action. These methods will have to be adapted to circumstances, and modified when experience shows this to be necessary.

The proposals which follow make no pretence of covering all problems of method and organization which the execution of the plan will raise as it proceeds. Their essential purpose is to establish a starting point which should enable us to launch the 1947 program, leaving open, however, the possibilities of adaptation suggested by experience when the plan is in operation.

It is in this spirit that we shall examine briefly the methods of elaboration, execution, and control of the plan, the allocation of key resources and certain reforms necessary to facilitate its execution.

Working Out of the Plan, Its Execution, and Control of the Execution

(2) The instructions given on January 10, 1946, by the Minister President to the Chairman of the *Conseil du Plan* after they had been passed by the Council of Ministers, covered the question of the development of the plan in the following terms:

The entire nation must share in this effort.

The country will accept the measures we are taking only insofar as it clearly realizes and understands the situation. The establishment and wide dissemination to the public of the balance-sheet of our whole economic situation, of the plans for modernization and their effects on the activities and lives of all of us, seem indispensable; whether it be to allow those responsible for our economic policy, once they are in possession of all the facts, to make a choice, or to have the government obtain the consent and co-operation of the nation for the carrying out of the decisions made. The plan is useful not only to the public administration and the executive, it is interesting to all Frenchmen who will find in it the main facts concerning our situation and instructions to guide them in their private initiative.

Since the execution of the plan will demand the co-operation of every one, it is absolutely necessary that all the vital elements of the nation share in its development. That is why the proposed working methods bring together in each division of the administration involved the best qualified experts, the representatives of professional organizations (workers, staff, employers).

The chairman and his staff establish the overall instructions for the Commissions on Modernization, constantly follow the progress of their studies, and see to it that each commission be enabled to take into account the effects, needs, or limitations revealed in the others, as well as the conclusions reached by the Commission for Overseas Territories. They are responsible for the integration of the work of the different commissions.

These instructions have prescribed the method used for the working out of the first plan submitted to you.

This method consisted in assembling in a collective working group and their constant consultation in order to gather facts pertinent for each branch: administration, industry, agriculture, workers' syndicates, experts; and, on the other hand, to bring out the overall picture, kept up to date, and known to all, thus enabling each person to integrate his objectives with the general objectives.

Following these instructions, eighteen Commissions on Modernization were set up whose work was co-ordinated by the commissariat. . . . For the first time, all elements interested in the progress of an industry or a production have found themselves assembled in order *to carry out together* a common task, in which more than a thousand people have participated.

There is a great difference in functioning between the Commissions for Modernization, and commissions which had been set up before that time. In the past, commissions of experts, or tripartite commissions played an advisory role to the government, which consulted them on specific points, while in the Commissions for Modernization, which include representatives of the government, the members have a common task and a common goal. Of course, there could be no question of giving them a power of decision which belongs to the government and the Parliament, but as a whole the commission has been given a collective responsibility and a definite task.

The experience of the work carried on in the last nine months has shown what psychological force such a method commands. Instead of being dry and bureaucratic, these commissions have become sources of inspiration, the work of a certain number of them which we are submitting with this report give proof of it. The knowledge acquired in common in dealing with common problems greatly facilitates decisions, and their understanding once they are taken. In many cases, action results from consultation alone.

At the same time that this work was proceeding, the General Board brought together in an overall picture the conclusions of the Commissions for Modernization, re-adjusting the objectives to the general picture as it crystallized, giving rise to direct exchanges of views between the different commissions, in order to mold a common point of view, when this proved necessary.

This is how it was possible, for example, for the board to establish, for the first time, a balance sheet, showing the needs of France in manpower for each field of activity during the next few years. Thanks to this balance sheet the Manpower Board was able to define long-term general measures, as well as the immediate measures recommended in its extremely important report.

Insofar as the suggestions of the General Board and the Commissions for Modernization incorporated in this report contribute to the solution of the problems which our country must resolve, the greatest credit must be given to the method used. The method essentially consists in: collective work, consultations before making any decisions, and overall picture constantly kept up to date and known to all.

We believe that only by applying such a method will it be possible to make the plan a living reality. The preceding chapters have shown

that though for the basic industries one could define and decide upon the programs for the next four years, this was not the case for the remaining French activities. For the latter, objectives were proposed for 1950, but these objectives were aimed at directing action, not at crystallizing it; they are temporary and can be revised. Just as we are submitting to the council a definite plan for 1947, so each year we shall have to work out a program which takes into account the essential resources that will be available. Otherwise, we should risk either by over-optimism to create inflation which would threaten the basis of stability necessary to the enterprise or, by an excess of prudence, to fail in fully utilizing our economic potential. The plan should be constantly elaborated and continually adjusted.

Thus alone can our problems be solved by a permanent exchange of ideas between the administration and the country, in a *concerted economy* and not in a directed economy on bureaucratic or corporative patterns.

We shall have to give wide publicity to the plan and to the exact programs in progress, as well as to the advances made. Only thus can converging action be reached, and only thus will the active participation of public opinion be obtained. If all the creative forces of the nation know and accept the distant objectives, as well as the immediate realities, they will be able to understand the reasons for the decisions made, and consequently make their contribution to the collective action.

(3) In the collective undertaking which consists of working out, executing, and controlling the execution of the plan, our administration has an important role to play. This role will be facilitated, and even, in many cases, made possible by constant consultation and free discussion of the problems to whose solution it is to contribute—discussions which are, and have been, going on for the last nine months, in the different Commissions for Modernization. In defining methods for work and the new organization demanded by the novelty of this plan, we must not forget, however, that in the past ten years our Administration has had to face, in the economic field, tasks becoming steadily more difficult and which, moreover, were not infrequently met with opposition. After struggling with the effects of abundance, it has had to correct the harmful effects of want.

Furthermore, in order to escape the grasp of the occupying forces, they have been impelled by the spirit of resistance to diffuse responsibility, and show co-ordination. The liberation, suddenly throwing our economy back into the war effort, established the priority of military over civilian needs. Victory once more reversed our objectives and methods.

Once more, our Administration has now to face a new task, the opposite of those which it has assumed previously. It has been assigned

direct control over the important sector of industry taken over by the state. Instead of directing a backward and self-sufficient economy, it must help to promote an economy that is expanding and open to world markets. It must contribute to organizing the optimum utilization of our resources for steadily increasing production and capital investments, for large amounts of trade.

It is evident that under these conditions, we cannot think of utilizing without profound modifications an organization, a body of rules and methods of action and control which often go back as far as 1940, if not beyond, and which inevitably lead to final results exactly opposed to what is needed at present.

(4) The method to be used in working out the plan so as constantly to adapt it to circumstances, to carry it out and control its execution, is just as important as the plan itself. As a result of the experience of the last nine months we suggest the retention of the new institution and methods which are embodied in the Commissions on Modernization and the General Board. We further suggest that the General Board, since it has been charged with assuring the working out of the plan, should be charged also with assuring the co-ordination and control of its execution.

Of course, certain modifications could be incorporated into the existing commissions, either to assure desirable regrouping, or in certain cases to change their composition with a view to putting an end if necessary to overlapping with commissions of similar scope.

Execution and Control of Execution

(5) In order to put the plan into operation, we must provide for varying methods of execution for different branches of our economy, methods which, however, must all originate in the principle that *modernization is an obligation for every activity in the country*, and that our limited resources of raw materials, manpower, and financial means must be utilized on a priority system for the execution of the plan.

These methods, while providing the necessary discipline, must favor creative initiative in all branches, and maintain legitimate profits and risks in private enterprises for which they establish necessary incentives and sanctions.

Public or State-owned Sector

(6) Adoption of the plan by the government will be tantamount to ordering the Administration, public utilities, and nationalized enterprises to carry it out. These cover a very large and important part of the French economy: harbors, roads, navigable rivers, post, telegraph, telephone, railroads, coal mines, electric power, aviation industry, arsenals, etc. . . .

The state-owned administrations and enterprises, under the control of competent government agencies, will have to apply the principle defined by the plan more strictly than those not owned by the government. They will have to account for the execution of the plan, for upon this execution depend very closely the resources available for the rest of the French economy. They will also have to take part, within the framework of the Commissions on Modernization, in the revision of the plan and the co-operative preparation of the annual programs.

By the number of orders it places, the public or government-owned sector is called upon to play a fundamental role in the modernization of industries which supply its equipment, and in the construction and public works industries, whose most important customer it is. Chapter VII ¹⁴ gives a detailed account of the exact measures to be taken in 1947.

Concentrated Enterprises

(7) In the free spheres which are sufficiently concentrated and whose importance is vital to attaining the general objectives, the execution will have to be based on contract agreements between public authorities and the industry concerned, the industry taking on the obligation of operating the plan, the public authorities that of furnishing the necessary means (credits, materials, etc.) or of facilitating their obtaining them. According to the organization of each industry, agreements can be gone into with one or several syndicates, with groups of enterprises, or even, in exceptional cases, with individual enterprises. Should satisfactory agreements fail to be reached, recourse can be had to the law of April 26, 1946, on the production programs.

It will have to be made absolutely obligatory that allocations of raw materials and credits be made strictly in accordance with these rules.

By these agreements, the contracting parties will assume the responsibility of operating the plan prepared by the Commission of Modernization and approved by the government. In the first place, they will have to divide the tasks of carrying out the plan among various enterprises, and submit this breakdown to the commission and to the administrative agency in whose authority the matter falls. They will submit to them periodical reports on the execution of the plan and legal disputes, and ask that new general instructions be worked out wherever needed.

Working in close relation with the Commission on Modernization, the administration dealing with the industry under consideration will have to assure the carrying out of all the administrative tasks and controls necessary to the realization of the plan, and particularly to see that the allocations be made in conformity with its requirements.

¹⁴ Omitted here.

This method will have to be applied for the execution of the program for 1947, especially in the steel, construction, fuel, machine-tool, farm-machinery, textile, and the automobile industries.

Scattered Enterprises

(8) In certain sectors, a contractual agreement is not possible because of the high number of enterprises. This is the case in the construction industry, which numbers 200,000 firms, and in agriculture where there are 2,400,000 producers. In these fields, of course, different methods of execution must be sought.

The programs are set up by the Commission on Modernization in collaboration with the administration, and trade associations. They are handed down to the branch offices such as the *Offices Agricoles Départementaux*, and executed by them, with the active co-operation of representatives of the administration and the professional associations.

National organizations specializing in research and technical studies develop the most modern methods of production and exploitation and publicize the progress of their work, particularly by setting up model construction yards and farms.

The action of the public authorities should consist of placing at the disposal of entrepreneurs and producers the materials and financial facilities necessary to the modernization, in establishing building programs and procuring contracts covering several years, and in setting up a long-term policy for agricultural prices, with the object of orienting production. In the case of construction and public works, modernization clauses must appear in the contracts signed by the administration and the nationalized enterprises, as already stated in Chapter VII.¹⁵

Decentralized Consulting Organizations

(9) A central organization, with branches for the various kinds of activities, must be complemented by a decentralized organization. For many problems can only be resolved if, after an examination on a national scale, they are scanned in the light of regional aspects.¹⁶ As an example, the reconstruction and modernization of certain harbors can be conceived only in relation to geographical details about the regional industrial development and activities, the priorities for reconstruction and for the construction of dwellings will depend on local development of economic activities; the development of certain factories and the

¹⁵ Omitted here.

¹⁶ The term "region" is not used here in its primary sense of administrative region. The authority over these regions of each consulting organization will be defined according to the problems to be treated and the corresponding administrative structures, committees, associations, etc.

closing of those which are not economically healthy brings up local problems of transportation, manpower, and reconversion.

We therefore suggest the constitution of decentralized consulting organizations. Their role will consist in studying, for the activities of the region as a whole, the application of the plan as set up for each activity by the Commission on Modernization, to establish within the framework of the region the necessary co-ordinations, especially between the programs of industrial development, reconstruction, and transportation.

These organizations might include, besides the local representatives of the administration, people qualified by their specialized knowledge of economic and social problems of the region, such as members of the trade unions, Chambers of Commerce, departmental agricultural agencies, etc.

Thus could a more general and exact collaboration be obtained between those working permanently for the development of the plan and the rest of the country.

Allocation of Key Resources

(10) As shown in Chapter IV,¹⁷ the plan can be carried out on the basis of priorities and the necessary rhythm of production only if, by the active intervention of public authorities, equilibrium is established for the main resources between what is available and what is required.

This demands the maintenance of a certain discipline insofar and so long as scarcities prevail. But only those controls should be maintained which are indispensable to the execution of the plan. It is on this condition that the French will understand and accept them.

We shall examine briefly: the allocation of essential materials; building permits; manpower; foreign exchange; credit; and rationing and prices.

(11) *Raw materials.* It is essential to proceed within a very short time to a complete revision of the rules of allocation now in force, to eliminate those which are not essential, and to render the rest more simple and effective. In particular, preferential treatment should be granted those who produce and sell their products instead of holding them back. In certain cases, the return to economic freedom should forbid the use of certain materials, or quantities should be limited.

As for materials such as coal and ferrous metals, the scarcity of which would disappear through the working of the plan, they, nevertheless, must continue to be allocated. And this allocation must be supplemented by control of manpower.

¹⁷ Omitted here; deals with materials and resources: power, ferrous metals, foreign exchange, management.

It goes without saying that allocations must be made strictly in accordance with the plan.

(12) *Building permits.* In order to preserve for equipment and reconstruction the necessary material and manpower resources, it is indispensable to retain control over new construction, to keep careful watch over its application. Otherwise, part of our resources will continue to be diverted to construction that is not urgent and may even be superfluous.

Control must extend to the public administration and to nationalized enterprises, which must not abuse their priorities, by undertaking projects without proven urgency.

(13) *Manpower.* Supplying the manpower needs of priority programs implies a series of positive actions as defined in Chapter IV,¹⁸ especially the control of all employment, and particularly of imported manpower.

(14) *Foreign Exchange.* Our foreign exchange resources can be husbanded only by the retention of control over foreign exchange and trade, the latter by means of control over exports as well as the maintenance of import programs for supplies and equipment.

(15) *Credit.* The allocation of credit resources, which the nationalization of credit has placed under the control of the state, is an essential element for the orientation of capital investments and the realization of the plan. Such allocation must be effected in accordance with the plan.

(16) *Rationing and price control.* While scarcities prevail, it will be necessary to maintain rationing and price control, save for improvement of its methods and organizations.

Reforms Necessary to Facilitate the Execution of the Plan

(17) *Statistics.* It is necessary that the government and administration be kept exactly and completely informed. In all highly industrialized countries, whatever their economic regime, in the United States as well as in USSR, statistics are at the basis of all government activity.

Lacking exact statistical information, the execution of the plan will meet with insurmountable difficulties, whether in putting the programs into operation, or proceeding to make adjustments required by circumstances. Besides, dependable statistics would doubtless permit us to abolish many control measures which we retained because the actual situation is not recognized.

Here again, a joint effort on the part of administration and private citizens is required: too many questionnaires and too many forms to fill out, added to a traditional scepticism toward figures have influenced the French either to withhold information demanded or to give inexact figures.

¹⁸ Omitted here.

Having reduced the number of questionnaires, we shall have to insist that exact information be given. This presupposes the unification of accounting methods and balance sheets and reinforcing of the coordinating powers of the agency charged with collecting and making use of them.

An especially strong effort must be made in the matter of national income and manpower statistics, necessary tools for the directing of government action.

(18) *Fiscal problems.* We must set up an equitable fiscal policy, which, while assuring the returns necessary to balance the budget, will facilitate the expansion of production and modernization.

Present fiscal methods and heavy taxes interfere with the concentration of industry. Exemption from those taxes must be granted when such merging is recognized as the necessary condition for specialization and modernization. We must also abolish the fiscal barriers to splitting up of enterprises.

Frequently business firms declare that they abandon certain investments indispensable to modernization, since the rules of amortization applicable in the matter of taxes on industrial and commercial profits are not compatible with the technical situation. Revision of these rules, therefore, appears liable to facilitate the realization of the plan.

These reforms can be set in motion rapidly and without difficulty. But a more profound reform which requires extensive study is equally necessary. The present tax system indiscriminately burdens all elements of production, equipment goods, raw materials in process of being transformed, as well as goods ready for consumption so that once international competition will have returned, exports of our products will become difficult, or even impossible. Instead we must institute a flexible system, which will lift the burden from essential production, favor modernization, and aid in the directing of consumption while satisfying its needs.

(19) *Provisions for depreciation.* The maintenance of price control in a period of scarcities has been mentioned as one of the essential measures to assure the best utilization of our resources. Prices, agricultural as well as industrial, must include the amounts necessary to maintain production equipment. The consumer should not be burdened with the capital investment necessary for modernization or the development of production, any more than with the cost of deferred maintenance. But, if we do not wish to see once again French equipment which has been renewed or replaced gradually disappear because of old age or obsolescence, we must make, through pricing, some provision for depreciation funds, which, by the way, will have to be strictly controlled. These general provisions must not result in raising the present price level; if they tend to have this effect, they should be enacted only when

increased production and modernization will have achieved a lowering of production costs.

(20) *Free enterprise and nationalized enterprises.* Everyone concerned must know definitely, for a fairly long period, the framework within which he must work. As soon as Parliament convenes, the government should define in no uncertain terms the dividing line between the nationalized and the free-enterprise sector of the economy.

Poland, Czechoslovakia, and Hungary: Approaches to a Fully Planned Economy

Introduction

THE present chapter, besides the introduction, includes: (1) significant parts of the *Polish National Economic Plan: Resolution of the National Council Concerning the National Economic Plan and The Plan of Economic Reconstruction for the Period, January 1, 1946—December 31, 1949*; (2) the speech (with some omissions) by the Minister of Industry, Hilary Minc, on *The Nationalization of Industry* (1946); (3) the *Statement of Policy of Mr. Gottwald's Government* in the Constituent National Assembly, July 8, 1946—the major parts devoted to economic issues; (4) the substance of the Three-Year Hungarian Plan (1947).

In many respects the planning of Poland and Czechoslovakia is on similar lines. They start with the assumption that a rise of output above pre-war levels is the first condition of improvement. It is, therefore, necessary to determine the use of scarce resources, as between investment and consumption, as among plants according to results expected, and also the time distribution of output. In the crisis conditions following an exhausting war, the governments are emphatic that in proposing investment expenditures, it will be necessary to take into account the proximity of the flow of consumer goods.

In order to raise output sufficiently, the governments urge full employment; the most productive use of workers through a process of upgrading, and the reduction of numbers in sterile and parasitic occupations; the extermination of cartels, the agents of restrictionism; the breaking up of the large estate; the acquisition of maximum amounts of capital from abroad; utilization of the monetary machine to put idle resources to work. Higher output would also stem from an acceleration of the rate of industrialization.

In both countries, the planners demand an improved status for the working masses. Higher output and better distribution will ameliorate the lot of many. Wage policy appropriately tethered to output, price policy directed towards reducing prices, and fiscal policy which would reduce if not eliminate exploitation by capital, are all roads to the goal of better treatment of the common man.

Unlike the aim of the various five-year-plans of the USSR, a rise in consumption standards seems to be not only an ultimate but also a proximate objective. Investment is justifiable only insofar as it will yield more consumption goods, and reasonably soon.

These are, indeed, planned economies, with public, co-operative, and private sectors. Nationalization is justified for its potential contribution to expanding output, and also for the leverage it yields the state for controlling the economy. Private economy, largely restricted to small business, will exploit the acquisitive instinct, but will operate on lines determined by the state. In short, the planners in these states look Eastward in their anxiety to take over the allocation of economic resources, and in their advance towards socialization of industry and measures taken to reduce property incomes. Their planning lenses are focused Westward, however, in their proposals to use monetary and fiscal policy to reduce interest rates, provide full employment, and increase consumption of the masses. Their plans are a curious mixture of Marx and Keynes.

In most respects, the Hungarian Plan which has just been made available follows the other two discussed in this introduction. Again, the planners emphasize the importance of raising real wages (by reducing prices and increasing wages), and improving the distribution of income in favor of low-income groups. By reducing taxes on consumption, by ridding the system of exploitative middlemen, and by assuming a stable monetary system, the government would bring about a decline in prices. Following in the footsteps of all Eastern countries, the Hungarian Government also is determined to embark on an impressive investment program. At least in the early years, its financing is to be almost the prime responsibility of government; and taxation on a progressive scale is to provide the required resources. In one important respect the Hungarian Plan differs from the other two. By the latter part

of 1947, Hungary clearly could not count on much help from the West; but the government avowed its determination to move ahead with or without foreign aid.

Poland: Production, Trade, and Industry¹

*General Guiding Principles of the Plan of Economic Reconstruction*²

[Introduction]

The plan of Economic Reconstruction covers the period from 1st January 1946, to 31st December, 1949.

In executing the plan, the Polish economy should aim at raising the standard of living of the working masses above the pre-war level. This aim will be attained by the redressing of war damage, the realization of the principles of the new economic and social order, and the economic unification of the old and the recovered territories, so that finally the enlarged economic apparatus which Poland within the new frontiers will possess after the redressing of war damage will reach normal output.

In accordance with the contents of the preceding paragraph the main purpose of the plan is to increase consumption. At the outset and especially during the second year, the realization of this goal will not allow capital accumulation to a sufficient extent to offset war damage; in some cases it may even be impossible to prevent further net loss of capital. In the final stages of the plan it will be possible not only to increase consumption but also to lay special emphasis on investment processes to the extent necessary to redress war damage and to create a balanced economic structure, to complete the process of reconstruction and to lay foundations for further development of the Polish economy in accordance with the long-term plan.

The plan will lay special emphasis on the development of those branches of industry which, though not directly satisfying the needs of

¹ *Polish National Economic Plan*, Resolution of the National Council Concerning the National Economic Plans and the Plan for Economic Reconstruction for the Period of January 1, 1946—December 31, 1949 (Central Board of Planning, Warsaw, 1946), pp. 17-27.

² The Resolution (*ibid.*, pp. 7-11) states the reasons for adopting a system of planned direction of the Polish economy and the principles of the plan; it gives the government the needed powers and entrusts it to present the necessary bills regarding the Plan of Economic Reconstruction. An Annex (pp. 29-108) presents basic figures of the Polish economy.

the consumer, will make possible the most rapid development of consumer goods production. In this connection:

(a) The manufacture of supplies for agricultural production (machinery and fertilizers) should be developed up to the capacity of agriculture to absorb them.

(b) The production of coal should be increased to the limit of technical possibilities, as this product has a decisive influence on Poland's ability to import.

(c) Owing to the great importance of power resources for all branches of production and the long period of investment involved in this field, electric installations and production of electricity should enjoy priority in the program of investments.

(d) In view of the importance attached to transportation throughout the period of the plan, investment in this field should also be given high priority. In the last stages of the plan, however, the special stress now laid on railway transportation will be shifted to highways and waterways; at the same time the reconstruction of ports and the development of sea navigation will proceed at the highest speed in order to meet the needs of anticipated imports, exports and transit trade.

[Guiding Principles]

Production Policy

- (1) In allocating the present scarce factors of production, distinct priority should be afforded to the production of consumer goods in the initial stages of the plan, taking into consideration, however, the requirements enumerated in the introduction.

In the production of consumer goods priority should be given in the following order:

- (a) staple foodstuffs;
- (b) necessary footwear, textiles and clothing;
- (c) industrial articles for household use;
- (d) other consumer goods.

- (2) After achieving the necessary increase in production of consumer goods for the home market, further increases should be governed by the level of home consumption provided for in the final year of the plan, and by the expected exports of these goods. During the second year of the plan, the index of per capita production of consumer goods should reach 85 (1938 = 100) and at the end of the second year this index should reach the pre-war level. In the last year, it should exceed the pre-war level by 25%.

- (3) The index of the value of per capita agricultural production should reach 90 in 1948 and 110 in 1949.
- (4) In the second year of the plan, the output of production goods not included in the introduction should be expanded to satisfy the policies defined in (1) and (2). In conformity with the increase in production of consumer goods in the third and fourth years, a gradually increasing stress should be laid on the output of production goods, in the following order: (a) to improve transportation; (b) to expand the production of consumer goods mentioned in (1); (c) to promote reconstruction of production facilities for capital goods.

As soon as the needs of transportation and consumer goods production are covered, increasing stress should be laid on the output of capital goods mentioned in (c). In this category of capital goods, priority should be given to items which can be produced rapidly. The requirements for capital goods which need a long period of production should be covered by imports as far as possible.

- (5) In order to accelerate the development of production of industrial products, adequate means should be provided to eliminate bottlenecks. In case of competition between the factors of production in this group (e.g., requirements of raw materials, semi-finished products, machines, labour) the foregoing order of priority should be applied.
- (6) The index of output of production goods per head should reach 250 in the last year of the plan.
- (7) Concerning the nationalized sector, efforts should be made to concentrate production in those plants with the best technical equipment and lowest cost of production; this applies mainly to those branches of industry where the full productive capacity cannot be utilized because of shortages of raw materials or auxiliary supplies.

Smaller plants, producing at high cost, should be amalgamated by pooling their machinery and equipment, thus striving to create better production facilities and reducing costs of production.

- (8) The technique of industrial production should be based on:
 - (a) the introduction of the assembly line method of production;
 - (b) the development of domestic and the exploitation of foreign inventions, as well as the enlargement and development of scientific research institutions;
 - (c) the use of substitute materials;

- (d) the application of methods of scientific management.
- (9) Efforts should be made to reduce the costs of production and unproductive expenditure, by fixing standard amounts of power, fuel, raw materials and semi-finished products to be used, the exact number and functions of workers to be employed in state commercial enterprises, by reducing superfluous manual workers employed in unproductive sections of industrial plants, by establishing standards of employment of auxiliary personnel, and by developing methods of utilizing all kinds of waste products.

Investment Policy

- (10) The total actual investment in the Plan of Reconstruction should amount to about 20% of the national income for the period of four years (i.e., to about 10 billion pre-war zlotys). Total investments in the different years of the plan may occasionally exceed the accumulated income, provided that the degree of credit expansion in any year is not out of line with available production factors (raw materials, machinery, labour, etc.) and does not impair the efficiency of the mechanism for regulating prices and consumption.

The above investments are determined on the assumption that the influx of foreign capital will amount to 15-20% of total investment.

- (11) Deferred replacement of the existing production facilities should not, in principle, be included in the plans of investment for the first two years if not required by the production program. This replacement ought to be included in the plans of investment for the third and fourth years. The above does not apply to replacement for current production.
- (12) The investment plan for the fourth year should provide for such new investment as is necessary for the production programs in the early stages of the subsequent long term plan.
- (13) Industrial investment should be made in conformity with the following criteria:
- (a) In the different branches of production in accordance with the principles which determined the production program in the preceding section.
 - (b) In the separate plants, according to: the productivity of the investment (relation of investment to the increase in production); the speed of productive effects (the increase of production over a given period); the reductions it will make possible in the cost of production.

- (c) As regards different production areas, if there is no decisive argument for a given locality further expansion should be avoided in Silesia.
- (d) Industrial investments during the period of the Plan of Reconstruction should include, in principle, the reconstruction of plants whose capital equipment has been only partly destroyed.

The reconstruction of plants with more than 50% of buildings and installations destroyed can be undertaken only with special justification. The construction of new industrial plants can be included in the plan of investment only if plants are required to complete the new industrial structure of the country.

- (14) Investments in agriculture should be made according to the following criteria:

- (a) The productivity of the investment.
- (b) How soon the effect on output will be felt:

In the field of private economic investment priority should be granted to investment in working capital, (livestock, machinery and fertilizers).

Investment in buildings should be made, in principle, only on destroyed farms the size of which justifies the erection of new buildings, and also in buildings on farms created as a result of the new structural changes in agriculture both in the pre-war and recovered territories.

Investment in land should not be included in the Plan of Reconstruction (except when connected with the completion of agrarian reform).

Investment connected with agricultural markets should bring the equipment up to pre-war standards, supplemented by such extensions as are required by the changes in the structure of agricultural life and the export of agricultural products.

- (15) (a) Essential investments in the Plan of Reconstruction should include expansion of the capacity of the existing transport network (railways, waterways, highways, telecommunications and ports) and should take the form of reconstruction of workshops and investment in rolling stock and ancillary equipment.
- (b) Transport investment should not provide for any extension of the existing network, except when indispensable for the perfection of the network within new economic structure.

- (c) In the fourth year of the plan the total tonnage carried will be at least 75% greater than that carried in 1938.
 - (d) In the field of electric power distribution, investments will include the reconstruction of the electric grid, new investment required for extensions in the new territories, and investments to meet the increased demand for electric power in the new economic structure.
- (16) The reconstruction of towns and villages should make possible the performance of such of their functions as are important from the political, social, cultural and economic points of view.
- (a) Investment in buildings should meet the needs for a minimum standard, especially:
 - In housing they should provide dwellings for the working people, enabling them to work continuously and productively.
 - Public utilities should be capable of providing full services for all dwellings and should make possible the provision of basic social services.
 - (b) In view of the importance of science and technique in the cultural and economic life of modern society, the higher educational institutions, technical schools, and scientific research institutes should be supplied with better accommodation than they had before the war.
 - (c) Investments in the field of health services should facilitate to the full the fight against epidemics and social diseases.
 - (d) All buildings to be reconstructed should be reconstructed in the period 1947-49.
 - (e) Measures should be taken to reduce the costs of building by means of standardization, prefabrication and use of mechanized construction equipment.

Foreign Trade

- (17) (a) In the second year of the plan it will be necessary to continue to import foods which are in short supply (e.g., fats, meat, or fish). Special stress should be laid on the import of raw materials and equipment for production of consumer goods (auxiliary equipment for industry, special types of wool and hides) plus a certain quantity of manufactured consumer goods themselves.
- (b) In the third and fourth years of the plan the import of food will cease. A smaller quantity of manufactured goods will be imported, but a greater quantity of raw

materials and investment goods for industry must be obtained in foreign countries.

- (c) Points (a) and (b) relate to normal imports covered either by current exports or by short-term credits. Foreign credits for the import of raw materials and food will be indispensable in 1946 and 1947. Credits for the import of investment goods, however, will be needed at an increasing rate throughout the entire period of the plan.
- (18) Exports in the second year of the plan will consist primarily of coal and, in addition, certain quantities of cement, zinc, sugar, salt. Markets must be safeguarded for the future for highly processed agricultural product, for breeding stock, seeds and selected manufactured consumer goods (e.g., textiles, metal goods, furniture, toys, carpets, etc.).

In order to acquire markets, a certain quantity of manufactured consumer goods may be allotted for export. In the third and fourth years it will be necessary to switch, if possible, to the export of more expensive consumer goods (luxury goods).

The more expensive goods may be exported immediately if, at the same time, cheaper ones can be imported covering the same needs (e.g., butter in exchange for edible fats).

Distribution in the Home Market

- (19) (a) While the plan is being implemented, the distribution system will be influenced by the type of products to be distributed. This will be achieved by changes, both in the nature of the products and in the character and structure of distribution channels.

The structure of the distribution system for the home market will be based on a suitable division of functions between the separate sectors.

Wholesale distribution of products from state owned industries will be accomplished primarily by the state. However, certain special responsibilities in the sector of wholesale trade will be assigned to the central offices of co-operatives.

- (b) The development of the general commercial sector, and the establishment of large department stores and market halls, will largely govern the extent of unlicensed trade.
- (c) Vocational training and the manufacture of technical equipment for trade will facilitate the operation of the distribution system.

Employment Policy

- (20) (a) During the whole period of the plan the objective will be to maintain full employment.
- (b) It is necessary to apply the general principle of "Optimum employment," i.e., the supply of labour to these enterprises which owing to their condition and technical equipment, show the greatest productive possibilities.
- (c) In view of the lack of skilled workers in industry, it is necessary to reorganize the work in industrial plants so as to create everywhere possibilities of replacing highly skilled and skilled workers by semi-skilled workers, and men by women.

In order to realize the Plan of Reconstruction it is essential to work out immediately a general plan of training technical workers (developing first semi-skilled and then skilled workers), for the needs of industry; and to make very economical use of labour in services, especially trade.

- (d) All enterprises or plants should endeavour to allocate some work which up to now has been partly or mainly accomplished by men, to women.
- (e) The transfer of new workers from agriculture to industry, and especially to coal mines, should be ensured by proper policies regarding wages and general working and living conditions.
- (f) Proper working conditions should be created for farm workers in the recovered territories, in order to organize and develop model farms and, in the transition period, to farm the estates destined for parcelation and settlement.

Co-operation

- (21) (a) Co-operation will play a decisive role in those branches of industry which have been given over to co-operatives in accordance with the law of 3rd January, 1946, regarding nationalization of basic branches of the national economy.
- (b) In the country, co-operatives will play their part in completing agrarian reform in the fields of production and processing. Co-operatives will become the most important medium of trade between town and country, both in the sale of farm produce and in the purchase of equipment for the farms. At the end of 1949 they will have at their

disposal an enlarged system of about 13,000 co-operative trading centres in rural areas.

- (c) In urban centres, co-operatives will take part in supplying the urban population with the essentials of life, in buying and selling for the artisan workshops and home workshops, in construction activities and in the organization of labour (labour co-operatives).

During the period of the Plan, urban co-operatives will double the number of their distribution centres, and will increase the turnover of the individual stores.

- (d) The part played by co-operatives in foreign trade will depend on the scope of their activities, and on their importance in the home market.

Private Enterprise (Agriculture Excluded)

- (22) (a) Factors accelerating the rehabilitation of private enterprise and ensuring the development of private initiative will be the general stabilization of economic conditions, and the operation of the law of 3rd of January 1946 regarding the establishment of new enterprises and the encouragement of private initiative in trade and industry.
 - (b) The efforts of private enterprise should be directed in the first place to those activities in the economy which yield the best results when carried on in the form of small enterprises, owing to their adaptability and the personal participation of the individual owner in the work; and to producing auxiliary and supplementary equipment for state industry.
 - (c) To achieve the aim of the Plan of Reconstruction the pioneer initiative of private enterprise should be a positive factor in those fields which are not included in the production plans of heavy industry (e.g., in the production of articles of second priority and articles not capable of mass production).
 - (d) The activity of private enterprise in the directions mentioned above in points (b) and (c) will be given the support and protection of the state. In the recovered territories the activity of private enterprise will be especially protected and helped by the state. Private enterprise should be financed chiefly out of the proprietor's own resources. Activities of a speculative character will not be allowed.
- (23) In 1949 handicrafts should attain such a level that the per capita value will be equal to the pre-war level. Therefore, pro-

duction plans should provide for the manufacture of machinery and tools required for handicrafts. The investment plan should provide the necessary credits for raw materials and semi-manufactured products. Provision should also be made for the training of craftsmen.

Poland: Problems of Distribution and Finance

Distribution of the National Income

- (24) Measures should be taken to ensure an equitable distribution of the national income, giving priority to labour before other factors of production, thus eventually ensuring equal participation of all members of the community in the benefits accruing from the economic reconstruction of the country.

To this end it is necessary:

- (a) to eliminate excess profits by preventing speculation and by an appropriate tax policy.
- (b) to raise the level of real income of the mass of the people by an appropriate policy of wages in relation to prices.
- (c) that in the allocation of income between consumption and capital investment, investment should, during the three years, gradually increase according to the thesis concerning production and investment.

Financial Policy

- (25) (a) The plan is based on complete exploitation of existing factors of production (raw materials, machinery, and labour), taking into account foreign trade.

The aim of the financial policy is the full mobilization of production, i.e., an appropriate co-ordination of the financial system with physical possibilities, in order to achieve full and speedy reconstruction as well as a controlled increase of the national income and distribution thereof.

- (b) In view of this, and in order to create a uniform financial structure, a financial plan will be prepared by the Minister of Finance. This plan will form an integral part of the general plan of economic reconstruction, and will co-ordinate the different sections of the plan from a financial point of view. The financial plan should take into account all revenues and expenditures of the public sector including state, central government institutions, and others (such as social insurance, etc.).

- (c) The financial policy of the state during the operation of the economic plan will be based on the maximum effort of the treasury and the banking system to mobilize all necessary financial resources, yet at the same time to keep the purchasing power of money stable. The fulfillment of the Plan of Economic Reconstruction must be based on the elimination of the danger of inflation.
- (d) The balancing of the budget as the basis for a sound national economy should be achieved as soon as possible. This principle will be maintained for the whole duration of the plan. At the same time parallel efforts should be made to balance gradually other public budgets, especially municipal, so that complete budgetary balance is achieved in 1949.
- (e) New methods are required to drain surplus money from the money market, and to improve further the taxation system during 1947 in order to mobilize large financial resources for national purposes.

The currency and credit policy should be based on the development of a suitable technique for the sterilization of the money market, taking into account the conversion of former German property into liquid funds.

Price Policy

- (26) (a) It is necessary to aim at the abolition, during 1947, of the system of double prices (fixed prices and free market prices). By the end of 1947 two prices for the same article should exist only in those cases where—in order to realize the aims of the social and economic policy—the differentiation of prices enables the correct balance of economic, financial and social motives to be achieved. This may happen when the same article serves the needs of different categories of workers; when it is necessary to give to the mass of the people a certain minimum of necessities at lower than market prices; or when there is, for social reasons, a need to exempt part of the supply of some goods from consumption taxes.

The elimination of the system of double prices should be achieved mainly by lowering those of the free market (including some free-market prices which are fixed by the state), and also by an eventual increase made by the government in wholesale prices of industrial goods to make them correspond to costs of production. The lowering of

- prices fixed by the state should take place only gradually as supplies become more plentiful.
- (b) Prices should tend towards the world price level. Exceptions to this rule may be made in the case of commodities which are instruments of social and fiscal policy, and in cases where special economic objectives are concerned.
 - (c) As to prices of agricultural products, it is necessary to aim at setting more attractive prices for certain special crops (oilseeds, fibres, tobacco, sugar beet), potatoes and pigs. Production of milk also should be stimulated by paying an attractive price to producers.
 - (d) Industrial prices will be governed by the level of costs of production which has been planned. The level of industrial prices should guarantee that state industry as a whole is profitable. The prices of individual commodities will be governed by the different elements of the general economic plan.
 - (e) It is necessary to aim at fixing prices of agricultural produce (as compared with industrial goods bought by the farmer) so that farming is more profitable than it was in pre-war years. Prices for agricultural produce should guarantee profitable farming.

Wage Policy

- (27) (a) In the first stages of the operation of the Plan of Reconstruction wages and labour conditions should be regulated. During that period the wage fund should increase in proportion to the increase in the quantity of consumer goods on the market, to the increase in the productivity of labour, and to the decrease in costs of production. Simultaneously with the raising of wages, there should be introduced those working conditions which are adequate, from the economic and social point of view, for individual and group remuneration. Regulation of working conditions and wages should end in 1948. Further changes in wages should depend strictly and exclusively on increased productivity of work.
- (b) While increasing wages, the big differentials should be eliminated, as they are economically unjustified and are unfair from the social point of view.

The aim should be to develop a wage scale which will pay uniform rates to all employees, doing similar work under similar conditions and having similar qualifica-

tions, taking into consideration differences in the cost of living in different parts of Poland.

- (c) The system, introduced in the post-war period, of paying workers partly in commodities, should be replaced entirely by a system of cash payments.
- (d) Basic social services to employees should apply uniformly to all branches of labour.

Poland: Nationalization of Industry³

The Government of National Unity is placing on the agenda of the Ninth Session of the National Council of the Homeland, two bills of capital importance:

the Bill on the Taking over by the State of the Essential Branches of National Economy;

the Bill on the Setting up of New Enterprises and the Encouragement of Private Initiative in Industry and Commerce.

The Industrial and the Legislative and Regulations Commissions examined the projects of both bills and a detailed report will be submitted by a representative of these Commissions. This will enable me to confine my speech to the main points in favour of the bills.

I have already said that these bills are of basic and capital character. One can even go further and say in earnest that they are of historic importance, because, together with the Decree on Land Reform of 6 September 1944, they define the economic foundations of democratic Poland. The Decree of 6 September put an end to the outmoded feudal system in rural Poland, by removing the landed gentry and providing for the division of their land among peasants and agricultural labourers. Thus the economic and legislative foundations of agriculture were laid down and an act of historic importance confirmed that the Polish countryside would have the chance to develop on the basis of individual peasant economy and without the feudal exploitation by landowners. While the Decree of 6 September defined the economic and legislative foundations of the rural system, the economic legislation for industry, commerce, transport, and finance could not be clearly laid down at the time, as the basic industrial and urban centres were still occupied by the

³ "The Nationalization of Industry in Poland," speech by the Minister of Industry Hilary Minc at the Ninth Sessions of the National Council of the Homeland (The State Publishing Institute, Warsaw, 1946), pp. 13-23.

enemy, and there were no objective data, which would have made possible—not only on the basis of doctrinal convictions, but also on the basis of practical experience—the marking out of the most suitable forms in the field of industry, commerce, transport, and finance, in accordance with the spirit of our times and national aims. To-day, after a year of experience in state governing and in the administration of national wealth, the time has come when these legislative and economic forms can be marked out with deliberation and a full sense of responsibility.

That is why today the government is placing before this High Assembly the projects of two bills on these vital matters.

The government regards as basic the following branches of national economy: larger industry, railways, and airways and as especially important storing, warehouse and trans-loading equipment, basic banking undertakings.

How should the term “larger industry” be understood under the prevailing conditions in our country? The analysis of the composition of our industry leads to the conclusion that it is not very concentrated. The average employment for a single undertaking amounts to about 200 workers. If the mines, the big metal, metallurgic, and textile industries be excluded, the employment would average about 130 workers. This shows that the terms big, medium, and small industry have a different meaning in Poland and in the industrial countries of Europe and North America. What in those countries is considered small industry, is by our standards medium, and the medium corresponds to our big industry. These factors should be taken into account when examining and discussing the limits proposed in the bill at which the state will, as a rule, take over. As we know, the limit has been defined as an employing capacity of 50 workers per shift. In the light of the foregoing, one may say that in the present circumstances undertakings above the limit cannot be defined otherwise than as “larger industry.” According to statistical data, if the total employment in industry and crafts be taken as 100 per cent, then, accepting the above limit, 60 per cent would come under private industry and crafts and 40 per cent under the nationalized sector.

These figures provide enough proof that the proposed bills confine the participation of state to “larger industry” only.

The question arises now, what will be the proportion of the number employed in the nationalized sector (larger industry, railways, etc.), to the total number employed in the country? Taking the total employment in non-agricultural occupations as 100 per cent, the nationalized sector would represent 25 per cent. If we take, however, the total employment, including agriculture and other occupations as 100 per cent, the nationalized sector would only be 10 per cent. One must take heed

of these figures to understand the character of the economic pattern we are building. Thus, the nationalized sector represents one-tenth of all occupations, one-quarter of all occupations excluding agriculture, and 40 per cent of manufacturing industry by itself. These are the proposed boundaries of nationalized economy. What conclusions can be drawn from these figures? Firstly, that in accordance with the title of the bill, the government proposes to nationalize only the most essential and key branches of national economy.

Secondly, that the scope for private initiative remains very great not only in agriculture, but also in industry, commerce, and other occupations outside agriculture. It can also be concluded that our economy will be based not only on private rural property and nationalized industry and transport, but also to a large degree on individual enterprise in non-agricultural occupations. If full and speedy development of our country is to be sought we must look after not only individual rural economy and nationalized undertakings but after private initiative in industry and commerce as well. That is why the government, simultaneously with the Bill on the Taking over by the State of Essential Branches of National Economy, is proposing the second Bill on the Encouragement of Private Initiative.

Reasons for Nationalizing the Essential Branches of National Economy

Let us examine the reasons which prompted the government to come forward with the Bill on the Taking over of Essential Branches of National Economy:

(1) Our country is in ruins. It must be rebuilt as soon as possible. Speedy reconstruction can only be carried out according to a general economic plan. Such a realistic plan can only be created and carried out, when means of realizing it are at the disposal of the state. It is possible to guide a state organism, like a ship, in a definite direction if one holds the rudder. The rudder in this case is the essential branches of national economy such as production of coal, iron, steel, electrical power, artificial fertilizers, textiles, agricultural implements, and machine tools, transport networks and telecommunications, and lastly, the banking system. Without holding the rudder there is no plan. Without the plan there is no reconstruction. That is why the state is taking over.

(2) Our country is in ruins. It must be speedily rebuilt. Quick reconstruction will not be possible if it takes place in an atmosphere of economic anarchy and chaos, in crises and unemployment.

Experience has shown that big business, that the rule of cartels and trusts, that industrial and banking potentates bring, as surely as a cloud brings rain, economic chaos, crises, and unemployment. It has been so

always and everywhere. It was like that in Poland after the last war and throughout the period of independence. A similar situation exists at present in many European countries. We do not want this. We want quick reconstruction and it cannot be achieved while there are trusts and cartels in power. That again is why the state is taking over.

(3) Our country is destroyed. It must be speedily rebuilt. It must be rebuilt and developed. A gigantic investment effort is ahead of us. We must save every penny to cope with it. We know from experience what huge sums were swallowed up by the unproductive consumption of big business. We know how much the almost regal estates, the castles and palaces, the traveling and hunting used to cost. We know and want no more of it.

We want quick reconstruction but it cannot be done while there is the huge and unproductive consumption of big business. Speedy reconstruction cannot take place if there is waste and extravagance. That is why the state is taking over.

(4) Our country is destroyed. It must be rebuilt speedily. To do it, it is necessary to direct all productive and financial forces towards this end. It is necessary to strain all efforts in the direction which gives the most effective results and at the same time covers the most urgent and important needs of the peasant, the working man, and the intelligentsia. We know from experience that this is not the case under big-business rule. Experience has taught us that under this omnipotent rule the law of profit governs and no matter how urgent the needs, the unprofitable regions are disregarded.

Is there a more classic example than the electrification of the countryside, which is unprofitable from the business point of view, but most urgent and important from our point of view?

We do not want the domination of the big business law of profit over the law of national needs and that is one more reason why the state is taking over.

(5) Our country is destroyed and with it the countryside, which is the cornerstone of the nation's vitality. The whole country must be quickly rebuilt, including the villages. But it must not only be rebuilt, it must also make up for being scores of years behind, as compared with the leading European countries. The countryside has to get rid of poverty, backwardness and ignorance, which were its lot up to the beginning of the war.

We know that the Polish village remained in poverty and ignorance because it was oppressed by landowners and exploited by cartels, trusts, and banks. We do not want this to happen again. We want to see the essential branches of national economy working for the good of the nation and of the Polish countryside. We want to bring to the village every

achievement of modern science. We want a village with electric light and power, with motor transport, agricultural machinery, and tractors. This was not and could not have been provided by the big business, but it can and will be by a nationalized industry, after the devastations of war have been made good and that is a good reason for the state to take over.

(6) The most ardent and forceful aim of the Polish people is the pursuit of sovereignty, but there is no state or political sovereignty without economic sovereignty. No sovereignty can be real, in spite of all the pompous big power pretence, when the basic economic levers of the country are in foreign hands. We were not an economically sovereign state before September 1939. We had 52.5 per cent of foreign capital in the mining and metallurgic industries; 87.5 per cent in oil production 66.1 per cent in electrical and 59.9 per cent in chemical industries; 81.3 per cent in electric power stations and waterworks; 59.1 per cent in insurance societies. We were not an economically sovereign country and as a result we were not a politically sovereign state. We want no more of this. We realize that a country, where the basic economic levers are in foreign hands, becomes by the irrefutable logic of economic facts a colony or a semi-colony of foreign capital. We want to be a free and independent country in fact and in action, and not in bombastic phrases. That is another good reason for taking over.

(7) The Polish nation has ardent and irresistible aspirations to democracy. There cannot, however, be political without economic democracy. Even outwardly the most democratic electoral system will not help. Even outwardly the most representative parliamentary system will be of no avail in putting democracy on a firm footing, if political democracy is not sustained by economic democracy.

History has taught us that trusts and cartels can dictate their will to nations, whatever the constitutional law and parliamentary representation. We have realized that the democratic aspirations of the Polish people would have been brought to nought if trusts and cartels were allowed to re-establish themselves. We realize that in the long run it would have meant the rule of reaction from within and bellicose brawls from without. We do not want this to happen. Politically and economically we have broken the landowner, and now we want by a solemn and legal act, finally and irrevocably, to seal the economic and political fate of the big finance. That is why the state is taking over.

(8) The Polish working masses are bent on their liberation from exploitation and the attainment of conditions of employment worthy of a man. We know that there is no freedom from exploitation under big business rule. In the present conditions of heavy war devastation, the rule of big business would mean for the workman the ever-deepening

poverty. We do not want it. As the reconstruction of the country progresses and the productivity increases, we want to see the growing prosperity of the worker. We want systematic and continuous development of social insurances and welfare. Already many luxurious homes of industrialists have been converted into nurseries and workers' clubs. We will not see these workers thrown out again in the street. We want to liberate from capitalist exploitation the most thickly populated working class centres. That is one more reason for the state's taking over.

(9) We know how great are the creative powers of the masses. We also know that these powers could not reveal themselves under the rule of vested interest, which tried to convert the working people into mechanical robots. A year of work without cartels and big capitalists has shown what a great deal understanding on the part of the worker can achieve. It has been manifested by the tremendous effort in the workshops which are the property of the whole nation. Already one thousand workers have taken over executive positions in industry and this process will be intensified. We do not want workers converted into mechanical robots, but workers conscious of the fact that they toil for the nation, for themselves, and not for a capitalist. We want workers who regard their work as a matter of honour and dignity and who know with certainty that the road to social advancement is open to them. That is why the state is taking over.

(10) Polish industry and other basic branches of national economy have now been working without big capitalists for almost a year. What has this year shown? It has shown that we have achieved better results than other countries. It has shown that we are developing more rapidly in production and productivity than would have been possible under big business. It has shown the superiority of nationalized over capitalist economy. It has also shown that workers, technicians, and engineers can well manage without big capitalists. We are the sort of people who profit by experience and draw conclusions accordingly. That again is why the state is taking over.

Taking into Consideration the Interests of the Nation

The government is proposing before this High Assembly the Bill on the Taking over by the State of Essential Branches of National Economy because:

- our aim is speedy and planned reconstruction of the country;
- we want to avoid economic chaos, crises and unemployment;
- we do not want waste and extravagance by big capital;
- we want the national economy to be governed by the needs of the nation—the needs of the peasant, the worker, and the intelligentsia and not by the law of capitalist profit;

we want an all-round development of the countryside and its release from backwardness ;

we want full political and economic sovereignty, instead of the conversion of the country into a colony or a semi-colony of foreign capital ;

we want to establish firmly political democracy on the broad basis of economic democracy ;

we want the abolition of capitalistic exploitation in the most thickly populated industrial centres, and the growth of working class prosperity ;

we want the worker to be a free man and not a mechanical robot.

Drawing conclusions from practical experience, we have realized how much more superior and efficient nationalized economy has proved to be than the big business form of management.

The government therefore proposes the Bill for the Taking over by the State of Essential Branches of National Economy in order to prevent their serving the interests of a handful of big business magnates, and to utilize them in the interests of the whole nation, thus building up its prosperity, its future and its greatness.

The state holds the essential branches of national economy and with it a huge wealth. Will this wealth be wasted? Will it serve the nation and not be a burden to it? Will it be utilized with purpose or to the contrary be a shackle to national economy? These questions must come to the fore when debating these important bills. They must present themselves all the more vividly in view of the inglorious and still fresh memory of our experiences with state-controlled enterprises of pre-war days. Often our present nationalized industry is being compared with these state-controlled undertakings. I should like to make it clear here and now, that such comparison is erroneous at its very source and consequently must lead to erroneous conclusions. These state undertakings administered by landowners and big capitalists were bound to be in tune with the general character of the state to which they belonged. Hence they worked not for the nation but for a state of landed gentry and big business, and therefore their activity did not give any positive results in improving the standard of living of the masses. Our state undertakings are the product of a democratic state, governed by the people. They are, therefore, serving and will increasingly serve the interests of the nation.

State-controlled enterprises in Poland were chiefly set up in those branches where private capital was unwilling to participate. They were like state islets in the ocean of private property. Under those conditions, state-controlled undertakings had to be structures outside the economic whole and thus deprived of the necessary economic base. Hence, they were in principle not a paying proposition and necessitated the laying out of large sums to cover deficits.

Our nationalized undertakings are within the framework of a planned state economy and are not separate and detached structures without economic bases. They make up great and compact economic entities, whose every part possesses the necessary base in the shape of other nationalized bodies. Some branches of these entities call for large investments and for that reason are temporarily unprofitable. These are counterbalanced by other branches which already bring great profits. Thus our state undertakings have good prospects of becoming, after even a partial reconstruction, a source of income to be reckoned with. State-controlled undertakings of pre-war Poland were administered by a bureaucratic machine, ossified and divorced from life and the masses, while their managers more often reminded one of Chinese mandarins than of energetic industrial executives. Our nationalized industries are governed by people of industry, old engineers, and technicians, and new elements recruited from the working classes and promoted to executive positions. That is why the spirit of Chinese mandarins is absent in the nationalized sector and in its place the young and healthy spirit of a well-understood enterprise will be growing ever stronger.

In organizing the nationalized sector we want to take from capitalism what has been good in it. We want to acquire the elastic and effective form of commercialised enterprise, working for profit and income. But we want this profit and income to serve the breadth of the nation and not a handful of big businessmen. We want to pour into the old form new democratic contents. We want to put at the helm new people from the masses. We are already doing it and shall continue to do so on an ever increasing scale. We realize that a great deal has to be done yet. We know that there are many striking shortcomings and that it is necessary to make workers take more responsibility for their places of work. It is necessary to form new ranks of industrial workers, and to create a network of controlling bodies in which not only the worker but also the consumer will be represented. We know how much will have to be done yet to weed out the after-effects of the occupation, the habit of speculating, the abuses, and the corruption. But we also know, that the Polish nation and the working class have enough strength to cope with all these tasks.

If we are asked what guarantee is there that the huge wealth transferred to the state will not be wasted, we answer: the guarantee lies in the democratic character of our state, in our economy, and in the initiative, the creative energy, the devotion, the gifts and talents of the Polish people. That is why the democratic Polish State, the people, and particularly, the working class, can, as experience has shown, not only preserve but also increase the wealth of the nationalized sector for the good of the nation.

Czechoslovakia: A Two-Year Plan—General Issues ⁴

Some Principles of the New Constitution

The new constitution must also embody the great complex of decrees on the nationalization of banking, mines, mineral resources, power, and the big and key industries. The new constitution must disappoint the hopes of all those who believe that the nationalized economic enterprises will be returned to a handful of big capitalists. On the other hand, the constitution must give protection to small and medium-sized private enterprise, and especially the legitimately acquired property of our farmers, tradesmen, shopkeepers, and all other persons and corporations must be safeguarded.

The new constitution will express the principle that every citizen has the right to work, to a fair reward for his work, the right to education, recreation, and to maintenance if he is incapable of working. In return every citizen is required to contribute by his work to the prosperity of the community. . . .

Some Questions of the Two-Year Plan

The government is convinced that the primary source of permanent prosperity of the nation and the republic is work. The new popular, genuinely democratic régime which emerged from the liberation of the republic roused the working people in town and country to exert a great effort; and thanks to it, Czechoslovakia was able to avoid social upheavals and to overcome the immediate difficulties caused by occupation and war. On this basis, we can work out a two-year plan of reconstruction and rehabilitation of the republic for the years 1947-48. The fundamental idea of the two-year plan is to raise the production of capital and consumer goods above pre-war level in order to achieve an appropriate rise in the standard of living of the population.

Industrial production. In spite of a considerable loss of labour caused by the transfer of Germans and Hungarians, industrial production is to surpass pre-war production by 10% by the end of 1948.

In order to carry out this two-year plan for industry the main effort must be concentrated on those branches of industry which are of paramount importance—whose slow development could delay the general progress, viz. in mining the output of coal, iron-ore and oil; in smelting—the production of pig-iron and steel; in power—the production of electricity and gas; in engineering—the manufacture of railway wagons

⁴ *Statement of Policy of Mr. Gottwald's Government*, pp. 7-49, with minor omissions.

and engines, tractors, lorries, agricultural machinery, building machinery, machine-tools, machinery for the mechanization of the timber industry; in the chemical industry—production of motor spirit, fertilizers, plastics; and in the consumer goods industries—the manufacture of textiles, footwear, and tyres. . . .⁵

Czechoslovakia: Production and Industrialization

Agricultural production. The agricultural level must reach pre-war level in 1948 to enable it to supply from domestic sources most of the increased demand for food.

The principal deficiency in our nutrition is the lack of fats and meat. It is therefore essential to give attention above all to the raising and improving of livestock as well as to the extension of grain acreage and increased yield of fodder-plants and oil seeds. We must endeavour to raise by the end of 1948 the production of beef by 35% compared with present figures, of pork by 100%, lard by 100%, butter by 10%, milk by 75%, and eggs by 50%. The increase of livestock produce can only be brought about by a decided increase in the present yield per acre of all kinds of cereals and fodder.

An increase in livestock and agricultural produce in turn requires the mechanization and electrification of agriculture to make up for the loss of manpower. The mere fact that in the Czech lands alone, 1,300,000 hectares of agricultural land formerly farmed by Germans has been turned over to Czech settlers, and 100,000 new settlements are being established, proves that the tilling of agricultural soil to the fullest extent requires a larger labour force.

It is therefore the task of the two-year plan for agriculture to provide in all districts tractor stations and to equip them with the minimum of tractors and agricultural machinery required. Similarly the network of local and regional agricultural co-operatives for the joint use of machinery must be extended and their equipment enlarged and supplemented by all kinds of binders, threshing-machines, sowing and planting machines, milking apparatus, electric breeding apparatus, etc.

All kinds of small agricultural machines will be put on the market for the use of individual farms.

In the sphere of electrification the aim of the two-year plan will be to extend to electricity network to the greatest number of villages, especially in Slovakia where at present electric current is available to less than half the population. However, the government is aware that even by taking all these steps it will not be possible to make good the

⁵ There follow details on planned output to be attained by the end of 1948 in mining, power, engineering, and chemicals—all registering large rises over 1937. These are omitted.

loss of labour, and it will endeavour to procure workers needed for our economy also in other ways.

The government will support the voluntary merging of land and will propose a new bill to simplify, cheapen, and democratize this merging in order to facilitate farm work for individual farmers by making full use of tractors and agricultural machinery. This measure will also release skilled workers for the settlement mainly of border-districts. The merging of land in the border-districts will be compulsory in order to prevent the superfluous partitioning of estates. Simultaneously an appropriate acreage of land will be reserved for the development of towns and villages and for industrial planning.

As far as the land in the interior of the country is concerned, the government deems it necessary to accelerate the confiscation of land property of traitors and collaborators according to the Kosice Government Programme and according to the Presidential Decree No. 12/1945, the Decree of the Slovak National Council No. 104/1945, and appropriate amendments. It will also be necessary to carry out a revision of all cases of land which was confiscated during the first land reform and later exempted from confiscation, although, according to the law, the property should have remained confiscated. The government will also revise the procedure concerning the distribution of residuary estates. The government intends to partly allocate the acquired land to smallholders and agricultural labourers, and to keep the remaining larger estates as model research and breeding stations under public administration.

The state as the biggest proprietor of forest land aims at administering this asset on lines similar to methods applied in nationalized industries in order to exploit more rationally forest resources. The government also intends to organize a public forestry service for the purpose of supervising all forest land. The government will support the accelerated setting-up of nurseries. It will propose a new democratic hunting law which will give the farmers, forestry employees, and other working people the right of hunting on condition that they will exercise it according to the recognized hunting rules, bearing in mind the maintenance of game and the supply to the population.

The government will endeavour to ensure an increase of water and forest acreage and efficient location in order to prevent the change of climatic conditions in certain regions and obviate the danger of spreading steppes. The government will support the construction of water-mains in the countryside.

Forest land will be administered in such a way as to repair as soon as possible the damage caused by enemy occupation and to enable it to fulfill its different tasks. It is also necessary to ensure the proper settle-

ment of villages in border-districts by workers necessary for the cultivation of great forestry properties there.

The building program. The building program to relieve the present housing shortage is one of the principal items in the two-year plan. The permanent housing shortage has been aggravated by building restrictions during the occupation, and by war operations through which more than 220,000 houses were destroyed or damaged.

In order to relieve the most urgent housing demands it is necessary to repair or build at least 125,000 flats up to the end of 1948. It is, above-all, necessary to repair all damaged houses covered by the law on building reconstruction, with special regard to districts and places which suffered most from the war. The repairs will be carried out within a general plan so that a healthy and organic development of towns and villages damaged by the war may be achieved by overall design and regulation. The government will support the initiative of all sections of the nation to further the construction of dwelling houses: building and housing co-operatives in the building of co-operative houses, national enterprises in the building of dwellings for workers, towns in the building of communal houses, individuals in the building of family houses, etc.

Within the framework of the two-year plan it is also necessary to repair the damage to public buildings caused through the occupation and the war. New large-scale public buildings, especially for rail, road, water and air transport, as well as for telecommunications, must be begun. To this belongs also the speeding-up of preparations for the building of a new House of Parliament. A far-reaching plan of construction for the utilization of water-power, especially hydro-electric plants, will have to be drawn up.

Building investments totalling at least 5 milliard Kcs must be made in order to enable industrial production to fulfill the demands imposed on it by the two-year plan. New agricultural buildings will have to be erected if livestock produce is to be turned out in increased quantities.

To fulfill this building program it is essential that the production of building materials—cement, iron, bricks, lime, timber, etc.—should reach at least pre-war level by the end of 1948. It will also be necessary to lay the foundations for the industrialization and mechanization of the building industry so that manual labour will gradually be replaced by machine-work. In this connection building research, the manufacture and use of new building materials, as well as the mass-production of prefabricated units, etc., must be developed.

A long-term loan must be sought and other appropriate financial measures taken in order to finance this building program. At the Ministry of Public Works, as the highest authority, all technical work must

be concentrated; bureaucracy should be uprooted, and building regulations simplified. It will also be necessary to adapt the confiscation regulations in order to achieve the fulfillment of this building program.

Transport. Alongside with increased industrial and agricultural production, as well as the building activity within the two-year plan, it will be essential to improve all kinds of transport—rail, road, water and air—so that its capacity reaches 1937 level. The transport policy for the whole state must be concentrated in the Ministry of Transport. In order to facilitate this concentration, all state transport undertakings will be organized in the form of national enterprises.

In the sphere of *rail transport*, the repair of railway installations, railway-stations, repair-shops, engine sheds, railway bridges, etc. which were damaged or destroyed by war operations must be completed as quickly as possible, as well as all railway-construction in progress. Special attention must be paid to the most important railway-links with foreign countries, in particular those with the Soviet Union. The efficiency of the Kosice-Bohumin railway line must be increased, and on the Czechoslovak-Soviet frontier adequate storehouses for reloading must be provided. Internal railway-communications must be rationalized in order to achieve substantial savings in personnel and material, especially in the turnaround of trucks and in the consumption of fuel and other materials.

In the sphere of *water-transport*, shipping tonnage must be increased as much as possible, the work of making the Vltava and the Elbe navigable must be continued, navigation on the Danube reorganized, the Bratislava and Komárno ports enlarged, the Oder waterway extended to Mor. Ostrava, and the preparatory work for the Danube—Oder—Elbe—Canal continued. In connection with the regulation of the river-courses, power plants will be completed or constructed, especially dams at Zbecno, on the Vltava at Lipno, on the Luznice near Bechyne, on the Nezárka near Krkavec, on the Svratka near Víř, on the Drevnice near Zlín, on the Oder near Spálov, and many others that have been begun or designed.

In the sphere of *road-transport* temporary bridges must be replaced by permanent constructions on trunk roads. The deficiencies in the road network caused by neglect during the occupation and the war must be removed, and the bus service as well as lorry transport of goods must be extended.

In the sphere of *air-transport* aircraft for home and international air-transport must be built and the equipment of airports improved so that they can become Central European centres of world air-transport.

Foundations for industrialization. Laying the foundations for industrialization of Slovakia also belongs to the important tasks of the two-year plan. The coherence and unity of the state require that the economic

standard of Slovakia should rapidly approach the economic standard in the Czech lands. This means that conditions must be created for the fullest utilization of raw-material and power resources as well as of labour for the extension of old industries and the creation of new modern industries in Slovakia. . . .

In order to exploit fully present industrial plants, and to create new industries it is vital to substantially increase the output of ores and coal and to modernize mining equipment. The metal works at Dubnice, Podbrezová, Filokovo, Trenčianske Biskupice and Krompachy must be reconstructed and modernized; several new modern engineering works must be gradually set up, and the shipyards at Komárno completed. The timber-resources must be rationally exploited by chemical and mechanical processes. This will require the modernization of present timber mills and the founding of new ones, especially in eastern Slovakia. The cost of the transport of timber must be reduced and transport rationalized in order to achieve the full exploitation of timber resources in Slovakia. The manufacture of building-materials must also be extended to central and eastern Slovakia. Slovak coal must be chemically utilized, the production of nitrate-lime introduced, the production of plastics must be started and a factory for pharmaceutical products founded. The building of a modern food industry for which Slovakia has a sound raw-material basis is especially urgently required.

The extension of the industrial basis of Slovakia can be achieved partly by the transfer of industrial enterprises from the Czech border-regions, and partly by direct long-term investments which are indispensable if Slovakia is to attain economic equality with the Czech lands within a short time.

Besides this, special attention must be paid to the building programme in Slovakia within the two-year plan so that the reconstruction of war-ravaged towns and villages should be completed by the end of 1948.⁶

Relief for Czech districts ravaged by war and occupation and for economically backward districts. The government will grant extraordinary financial and material aid to those districts in the Czech lands which have sustained particularly heavy damage during the war. This applies especially to the districts of Opava, Breclav, Brno, Plzen, Kralupy, Sedlcany, Neveklov, Vyskov, etc.

Particular care must be devoted to economically backward regions in the Czech lands, especially in southern Bohemia, the central Vltava region, and Podbrdská, the Czecho-Moravian plateau, Valassko, and Slovácko regions which are unable to support the local population. It is necessary to arrest the depopulation of those districts, to raise their

⁶ A section on resettlement is omitted.

living standard by extending the road network within the two-year plan, by improving road transport, by completing the electrification of villages by exploiting water-power and lignite deposits in southern Bohemia; by establishing such industries as will be able to utilize local raw material resources and will provide the relatively greatest potentiality of employment without requiring the erection of special factory buildings and the supply of large quantities of raw materials from distant places. In view of the above, greatest emphasis will be laid on the wood-working industry, the food industry, and the manufacture of toys, finishing of furs, the optical industry, precision tool-making, electrical engineering, and the pharmaceutical industry.

Czechoslovakia: Conditions Necessary for the Fulfillment of the Two-Year Plan

The fulfillment of the outlined aims of the two-year plan will require the mobilization of all creative forces of the nation and a sound policy in the various sectors of economic and public life. Let us consider only several of the main conditions required for the fulfillment of the two-year plan.

Overcoming the Labour Shortage

The main condition essential for the fulfillment of the two-year plan is the overcoming of the labour shortage. Industry, the building trade, and agriculture will, after the transfer of Germans, lack at least 500,000 workers, especially for manual labour. This labour must be found at all costs within the great "National Mobilization of Labour."

The participation of every citizen in the economic construction must become a patriotic duty. All will be done to give productive work, especially manual labour, the place of honour which belongs to it by right. Above all, it will be necessary to find sufficient labour for those branches of production which are of decisive importance for the two-year plan, such as mining, the manufacture of building-materials, the building trade, and agriculture; gradually to transfer into the production process those workers who are still not directly participating in it and who can be spared from their present employment, whether public or private; to return skilled workers to their original occupation; to mobilize for productive work all those who have no regular employment although fit to work; to secure young trainees for the most important branches of production; to increase the number of women workers; and to mobilize for industry also persons with decreased working ability. All these measures must be carried out so as to facilitate to the workers as much as possible the transition to new productive work, and to secure for them a decent standard of living.

Another means to overcome the labour-shortage is the raising of productivity, i.e., the raising of output per head and per shift. Manpower must be replaced by machine-work wherever possible. It is necessary to introduce to the greatest extent a system of grading wages and salaries, to reward increased output by increased income to the workers, and insure that income arising out of increased output is not swallowed by high taxation. Altogether, productivity must be raised within the two-year plan by 40% as against the present rate so that we should be able to surpass pre-war productivity as much as possible by the end of 1948.

In order to carry out successfully the national mobilization of labour it will be necessary to co-ordinate all regulations concerning the direction of labour, to equip properly all Labour Exchanges, to prepare the publication of a Code of Labour, to carry out consistently all regulations concerning the registration and classification of workers and to modify suitably the statutory rules on holidays.

The Organization of the Production and Distribution Machinery

An efficient re-organization of our productive and distributive apparatus must be carried out together with the mobilization of labour for productive work, and with the raising of output.

The organization of nationalized industry must be completed as soon as possible and placed on a sound financial and commercial basis. General managements of the nationalized industrial sectors together with the managements of individual enterprises are responsible for the economic administration of the enterprises under their management. Decisions concerning the operation of their enterprises must rest with them. The appropriate authorities as supreme organs will, after working out the necessary production plans, concentrate their activities on supervising and carrying out of these plans, and on general problems of the prosperity of enterprises as well as of whole nationalized sectors, and will not interfere with the organization and the smooth operation of enterprises. Party-membership must not influence the appointments to executive posts in nationalized industries; only expert knowledge and national reliability must be the deciding factor. Everyone holding office in nationalized enterprises will be personally responsible for the results achieved, and those proving inefficient must be immediately replaced. On the other hand leading officials will receive extraordinary rewards for exceptionally successful results.

A suitable organization compulsorily combining nationalized and private enterprises must be established in the form of National Federations of Industry, with a National Central Federation of Industries. The appropriate state authorities will be able, through these bodies—the organization of which must be economical and flexible—to direct whole industrial sectors according to plan, to bring the interests of the nation-

alized and non-nationalized parts of the industry into harmony and to fit them into the overall state plan, without interfering with healthy competition between them. The government takes this opportunity to declare that it regards the drive for the nationalization of production as finished.

The compulsory organizations of crafts, trades, and businesses must be transformed, their activities simplified and economized; the will of their members must be democratically asserted in these organizations, and it must be possible to direct this large sector of crafts, trades, and businesses to the advantage of its individual members as well as to the advantage of the whole community.

The government will also support the co-operative movement, which has already in the past tried to diminish by mutual economic aid the dependence of the individual worker, the isolated peasant, the small tradesman and the working intelligentsia on the capitalistic exploiters, and which has been making a commendable effort for the economic consolidation of the state since the very beginning of our renewed independence. In order to define the scope of activities of the co-operative movement within the economic plan it is necessary to organize it uniformly and to provide its supreme authority with sufficient powers. The government will therefore speed up the drafting of a bill concerning the Central Council of Co-operative Societies and special federations of co-operatives. It will also take the necessary steps to elaborate a new law of co-operative societies which will replace the obsolete and inadequate Act of 1873. All this care for the co-operative movement must not impair the competitive spirit between it and private enterprise.

Finally, the government considers it necessary to simplify distribution and reduce its costs so that the prices of commodities are not increased out of proportion before reaching the consumer and so that the reduction of the costs of distribution is of advantage to the consumer, the producer and the retailer. It is necessary to remove all links in the chain of distribution which are superfluous from the economic point of view, to renew direct contact between producer and retailer, as well as direct contact between retailer and nationalized industries wherever this proves practicable. The system of controlled economy in distribution should be gradually relaxed to such an extent as progress in industrial and agricultural production and the development of foreign trade permits.

The Completion of the Currency Reform and Stability of Currency

The government will see to it that currency reform is completed as soon as possible. For this purpose it will be necessary to establish a basis for the registration of capital and to fix the amount of the tax on

property increment, and the actual capital levy itself in accordance with the act passed by the Provisional National Assembly. By this measure the social stratification of owners of blocked accounts and other property will become clear as well as the surplus purchasing power not yet absorbed by taxation.

From the blocked accounts, remaining after all taxes have been deducted, fixed amounts will gradually be freed. Their size will be fixed according to the financial situation of the depositors and with a view to obviating the danger of inflation. The remainder of the blocked accounts will be suitably consolidated.

The government appeals to the public to have understanding for and confidence in the measures taken in currency matters. They are aimed at preserving the stability of the currency, at the prevention of inflation and the valorization of savings, which have so far been blocked. The government's efforts will be the more successful, the greater is the confidence of the owners of free currency in the financial policy of the government, and the more money they deposit with banks and savings-banks, making it possible to put their money at the disposal of the great work of our economic reconstruction. The stability of the currency in relation to foreign exchange will also be preserved.

Financial Policy and Organization of Banking

The financial policy of the state must secure the fulfillment of the two-year plan financially. Prepared capital construction for which there is sufficient labour, raw materials, and tools must not be delayed by a lack of funds. Another task is the safeguarding of the disposal of the increased production of consumer goods. The balance between the total supply and demand of consumer goods will be achieved by a reasonable price and taxation policy, if necessary by floating a national loan.

Planned investments should be financed partly from the enterprise's own funds, partly by bank credits, and lastly, from public funds.

With the completion of the currency reform it will be necessary to revise interest rates, which must correspond to the present standard of our national economy and encourage its further development.

Budget policy must aim at lowering the deficit in public administration, which must be run more economically. On the other hand it is necessary that the national income should grow, that morale of taxpayers should improve and revenue go up.

Banking must be reorganized according to the requirements of planned economy. The chief idea underlying the measures to be taken will be the concentration of all capital assets and their centralized distribution into two channels: towards investment and production.

To implement the unified direction of nationalized and non-nationalized banking, a National Banking Council must be established with-

out delay. This body will possess the highest authority in all sectors of banking.

The Central Management of Banks, as the executive body of nationalized banking, must work for a speeding up in the co-ordination of the activities of the various banks and see to the simplification of their organization and activities.

Nationalized banks will concentrate their business on granting credits for production purposes. Each nationalized enterprise will be financed by one bank only. Financial dealings between national enterprises or between enterprises and public bodies will be carried out by drawing on current account. Only smaller amounts will be handled in cash. Liquid funds will be paid at once into such current accounts. National enterprises are not allowed to grant credits to one another, because such transactions would misrepresent their financial situation.

The government will encourage all forms of payment through current account, by legislative and administrative measures and by publicity.

Special investment banks will cater for the requirements of capital construction.

By separating production and investments financially, and by the specialization of banks according to sectors of production, and finally by co-ordination between banks and other financial institutions, the former unsound competition between banks will be eliminated. Banks will then be in a better position to fulfill their new functions, which will comprise the supervision of national enterprises; this specialization will enable the banks to obtain a picture of the production side of the enterprises for which they cater. Measures such as these will facilitate and simplify the control of taxation, prices, wages, as well as the control of the speed of turnover of goods and of the efficiency and economic operation of the national enterprises.

In order to enable insurance companies to fulfill their functions within the planned economy of the country, it will be necessary to bring about a suitable concentration of nationalized insurance business with a view to reducing costs.

Taxation Reform

The simplification and modernization of the entire system of taxation is a further task which must be achieved within the two-year plan. The system of taxation must be simple, clear, and comprehensible to every taxpayer; it should distribute the burden of public administration in a just manner.

Direct taxation will be reformed by the introduction of three basic types of taxes, *a tax on earned income, a tax on industrial enterprise, and a tax on unearned income.*

Tax on earned income will contain four categories. In the first place, there will be a tax *on wages and salaries* for all types of gainfully employed persons, including the recipients of superannuation and disablement benefits. The tax must not, however, swallow up higher wages or salaries earned by increased output or efficiency. The second category will be an *agricultural* tax, replacing the former direct taxes plus turnover tax. The third type of tax will apply to *trade* and the fourth will concern the *professions*.

With the reform of direct taxation, indirect taxes will be subject to revision. In particular the present turnover tax will be replaced by a *general excise*, graded according to the economic importance of services or goods subject to this tax. This method of taxation will be a means to regulate the market and consumption.

Before the two-year period is over, a recognition of revenue authorities must be carried out, so as to amalgamate various branches into unified revenue offices.

The Development of Foreign Trade

Czechoslovakia has insufficient raw materials to draw upon at home, and therefore the fulfillment of the two-year plan depends to a considerable degree on our foreign trade.

The content and volume of our *imports* will be determined by the need to import a number of essential raw materials, agricultural produce and food, as well as certain semi-finished and finished products. The import of sufficient quantities of iron ore, phosphates, pyrites, soda, industrial salt, wool, cotton, hides, oil-seed, etc. must be secured. The government will therefore endeavour to renew trade agreements as well as monetary and credit agreements with such of the more distant states as possess sufficient raw materials.

The content and volume of our *exports* will be determined by the need to pay for imported raw materials and foodstuffs by the export of manufactured goods. Speaking generally it will be essential substantially to raise our exports for this purpose, especially after the cessation of UNRRA deliveries. Our imports will be paid for primarily by the export of finished products of the engineering and chemical industries, by the export of footwear and leather goods, as well as certain agricultural products and foodstuffs such as hops, malt, sugar, beer, and potatoes. The government will further endeavour to settle the problem of transport of imported and exported goods before an international forum.

The orientation of our foreign trade must guarantee us as far as possible permanent markets of our products and permanent buying sources for our import needs, in order to gain independence of economic fluctuations and crises. A substantial all-round extension and deepening

of trade relations with the Soviet Union and the other Slav States, as well as the rest of the countries of central and southeastern Europe is needed above all for this purpose. We shall also systematically deepen our trade relations with the United States, the British Empire, France, and other countries. In our efforts to raise industrial production we shall bear in mind that quantity must not be at the expense of the high quality production which has always been and will continue to be our main asset in international competition.

The *organization* of our foreign trade must be adapted to the new structure of our economy. Developments aiming at the concentration of the organization of foreign trade will be supported so that imports and exports may be uniformly directed, according to the needs of the state. The cost of imports must be reduced by the elimination of all unjustified middlemen; imports will be concentrated according to branches of trade; the number of links between the importer and the manufacturer or consumer will be reduced; and importers must be prevented from taking advantage of their monopolist position. In the sphere of export unsound mutual competition in foreign markets between Czechoslovak firms must be eliminated and provision made lest foreign exchange gained by export be misused, but on the contrary, it should benefit the whole national economy. . . .

Czechoslovakia: Raising the Standard of Living of the People—Social, Health, and Cultural Policy

The main purpose of the two-year plan is to raise the standard of living of our people. If we fulfill the two-year plan, raise industrial production by 10% over pre-war figures, reach the pre-war level of agricultural production, develop foreign trade to the required extent and mobilize all available manpower for productive work, then we shall, in spite of the necessary long-term investments, be able to raise, by the end of 1948, the standard of living above the pre-war level both materially and culturally. Within the framework of these possibilities the government will press forward with the following measures.

Prices, Wages, and Salaries Policy

While carrying out the two-year plan prices of industrial products will be gradually reduced. Further price reductions can be reached by lowering the costs of distribution. By the end of the two-year period it will be possible to remove rationing step by step and to free consumer

goods, of which there will be a sufficient quantity, at reasonable prices. One of the methods for raising the standard of living of our people is therefore an increase of the quantity of consumer goods with a simultaneous decrease of their prices.

A second means to achieve the same aim is an appropriate and fair wages policy. The present system of wages which does not properly appreciate the individual worker's performance and thus does not sufficiently encourage individual exertions, must be modified into a system of wages based on merits, i.e., on the output of the worker and on the difficult character and responsibility of his work as well as on his previous training, necessary to accomplish the task entrusted to him. So far only about 20 to 30 per cent of workers in industry are paid piece-work rates. In the course of the two-year plan it will be necessary to double the numbers of piece-workers, thereby increasing output and wages, and reducing the price of goods.

In order to increase the standard of living of clerical workers and to enable them to fulfill their function properly, in this category, too, efficiency pay and bonuses are to be introduced.

Pay and Service Conditions of Civil Servants

An important factor with a decisive bearing on the smooth working of the administration is a fair structure of the pay and service conditions of civil servants, giving them a sufficient income and thus enabling them to carry out their duties without financial anxieties.

The present system of salaries will have to be replaced by an entirely new one, based on a unified social policy, and with similar adjustments as those made in economic life. The 1926 Salaries Act No. 103 and all regulations based on it are entirely obsolete. The principles underlying the act and its whole structure are unsuitable and do not fit the changed conditions. Legislation in respect of civil servants will have to be amended in accordance with modern principles and these new conditions, if possible as early as 1947.

The reorganization of public administration is closely allied with staff policy. In this respect it will, above all, be necessary to carry out a revision of the establishments in all branches of administration, adjust them to actual requirements, and transfer surplus personnel to other sectors according to their abilities. The government will see to it that no public servant is victimized on account of his political opinions, so long as they are in accordance with the democratic order.

An important factor in staff policy must be the endeavour to raise the special qualifications of civil servants. A systematic specialized training for the civil service is indispensable, if officials are not to get stuck in general knowledge.

Some Tasks of Social Welfare and Health Policy

With a view to carrying out the principles laid down in the Kosice Programme the government intends to implement first of all the following proposals within the orbit of social policy.

Social insurance will be made more economical and unified in purpose and organization, in order to bring its services nearer to the persons insured, thus building gradually a *national health insurance service* and following thus a *national superannuation insurance*. Prior to this the government will start step by step to improve superannuation insurance by the removal of the existing differences between corresponding rates in the Czech lands and in Slovakia.

In the sphere of public health the government, starting from the principle that the right to the protection of health is one of the basic civil rights, will make plans and take all necessary steps towards the organization and unification of a state health service on a broad basis, in accordance with up-to-date standards of medical science. Special attention will be paid to the prevention of disease. Recreational facilities for the working population and young people will be improved and extended.

The government devotes special attention to the care of mothers and children in the widest sense. The high percentage of infant mortality must be lowered by all available means and steps must be taken to increase the birth-rate.

The government will also endeavour to implement an improved social and economic standing of the housewife.

Child and youth welfare will be unified and made a public service, but the co-operation of voluntary bodies and institutions preserved. The overall care for working youth and students will be broadened in the social, health and educational sphere. Youth will be educated to enjoy its employment, in particular productive work.

General social welfare for those who, owing to their income and state of health, have to rely on outside aid or support, will be put on a new footing, unified and made a public service with the widest co-operation of all voluntary bodies.

The care for the victims of the two world wars and of Nazi persecution will be extended. The government will re-adjust disablement and widows' pensions and grants to orphans, thus securing them an adequate standard of living. The problem of retaining persons disabled by the war will be tackled to enable them to contribute to the national effort.

The present housing policy will be revised and redefined, in the interest of the whole population and the State. Particular consideration will be given to large families.

The economic, social and cultural standard of the countryside will gradually be raised. The government will support all organizational measures leading to this aim.

Educational and Cultural Policy

The government will draft a basic education bill, which is to complete the modernization of our education, with a view to giving all young people as wide a general knowledge as possible and to providing higher education for talented children irrespective of the social position of their parents.

Particular care must be given to *technical schools*. Here it will be necessary to regulate the influx of pupils with regard to the surplus of labour in distribution and administration and to the shortage of juveniles entering industry.

These considerations will be of importance for the planning of reforms in university training, in order to cater for all requirements of cultural and economic life. Considerable care must be devoted to technical training by an appropriate organization of technical universities and of its preparatory stage in secondary schools. The extension of technical museums as well as exhibitions will contribute towards this aim.

Within the economic possibilities it will be necessary to implement the act on university training for teachers by establishing pedagogical faculties in our universities.

Conditions in theatres call for a general *law on theatres* regulating their position. State centres for music and arts will be established, to give these branches public support.

The task to establish a *Czechoslovak Academy of Science* as a central institution for scientific work has also become topical. It will also be necessary to transfer to state ownership and rebuild the National Museum and to erect a National Gallery.

As far as broadcasting and films are concerned, it is necessary to carry out a definite legal and organizational regulation of the administration of Czechoslovak broadcasting and film enterprises.

Finally, it will be necessary to extend and intensify *adult education* as an important factor in the reconstruction of the state and in an effort to achieve democratic maturity of the broad masses of our people.

As far as *youth, its organization, and physical training* are concerned, the government, in an effort to strengthen the nation's moral and physical powers of resistance, the defensive power of the Czechoslovak people, and national unity, has as its aim to achieve the democratic unification of the Czechoslovak youth movement and physical training, in the framework of a united, non-party state organization on the basis of a national and democratic program. It is left to the political parties to

receive into their ranks and to educate young people according to their own ideas, at the same time having due regard to the uniform youth and physical training organizations.⁷

The Hungarian Three-Year Plan: ⁸

Investment, National Income, and Distribution

Introduction

Economic planning has been gaining ground in post-war Europe with considerable rapidity. Apart from the Soviet Union, where it was adopted already twenty years ago, Yugoslavia, Bulgaria, Czechoslovakia, and Poland have switched over to planned economy, and France is about to follow suit. The political background of this trend was set by the entry into the political arena of the great working masses in the liberated countries. These masses have come to realise that planned economy was the best means for the utilisation of their efforts and the economic resources of their own standard of living.

However, in countries that were the principal victims of total war—and Hungary is certainly one of them—the introduction of planned economy has proved an imperative necessity as well. The wholesale destruction of means of production, of buildings, of live-stock, and of transport facilities upset the balance of the national economy in those countries. As a result, it is now necessary for every available means to be employed for their recovery and rehabilitation. Careful and far-sighted planning is needed to restore the economic equilibrium or, rather, to establish a new and socially more equitable state of balance. It goes without saying that, of necessity, investments will be limited by the volume of consumption goods, the productive capacity, and the financial means available. Selection of the most profitable had to be made from among a huge number of investments both possible and very urgent. The proper choice can be made only by means of a plan drawn up well in advance.

The Three-Year Economic Plan is based on the common understanding of the four political parties represented in the Coalition Cabinet; in other words, the Plan rests upon their joint and firm determination not to permit the vitally important problems of the economic, social, and cultural advancement of the people of Hungary to flounder on the high seas of politics. That is why the four political parties have agreed upon the adoption of the long-term measures required to settle such problems and have undertaken to respect these resolutions as equally binding upon each of them.

⁷ The following section deals with foreign policy.

⁸ Published by the *Hungarian Bulletin*.

The details of the Three-Year Plan were first made public by the Communist Party and, later, by the Social Democratic Party. The other political factions represented in the Coalition had declared their approval of the Plan and their readiness to participate in the preliminary work of elaborating its details. Early in March 1947, the two Hungarian Marxist parties coordinated their respective proposals for the Three-Year Plan. At that period, the Independent Smallholders were faced with a grave crisis within their ranks as a result of which the crystallisation of the party's economic policy was retarded. This circumstance prevented the Smallholders from coming out into the open with an economic plan of their own. Nevertheless, their experts made a contribution with a detailed elaboration of proposals covering agricultural problems. The representatives of the National Peasant Party likewise contributed valuable proposals during the drafting of the Plan.

After the two Marxist parties had coordinated their proposals, the four principal political factions set up a committee to draft the final wording of the Plan. The purpose of this booklet is to acquaint the reader with the work of this committee, namely with the gist of the Three-Year Plan.

In the years beginning with August 1, 1947, the Plan provides for investments to a total value of 6,585 million forint. Of this amount, 2,000 million (30.4 per cent) have been allocated to agriculture and to the improvement of the material and cultural well-being of the agrarian classes; 1,745 million (26.5 per cent) have been set aside for the purpose of increasing the productive capacity of mines and industrial enterprises; 1,676 million (26.5 per cent) have been reserved for the reconstruction of postal services and transport; and 1,164 million (17.4 per cent) have been reserved for building programmes as well as cultural and social investments.

When computing the investments, planned proportioning was sought for. The limited means had to be made use of in such a manner as to meet the vital demands of every branch of the nation's economy. As a result, agriculture is to be provided with machinery, live-stock for breeding purposes, artificial fertilisers, improved seed, and irrigation facilities. The Plan further provides for technical education, for the development of the agricultural industries—in the first place the dairy and canning industries—and for the manufacture of artificial fertiliser, tractors, and agricultural machinery. It provides for far-reaching improvements in rural electrification and in the extension of the network of highways, likewise for the construction of schools, health centers, housing facilities for teachers and medical practitioners, and, finally, for the construction of modern and hygienic homes for the farming population.

In the field of industry, the target is to enlarge our power resources

(coal and electric current) as well as to achieve the extension of the iron, metal, and machine industries, a highly developed machine industry being essential not only to further industrial advancement, but also to rationalise agricultural production. Concerning other branches of national economy, the Plan envisages principally the development of the chemical, textile, building material, wood, leather, paper, and printing industries as well as that of the artisan industries.

The objectives of the investments for transport and communications are provided by the present conditions of these installations; the efficiency of these installations is to be increased above the pre-war level by the Three-Year Plan.

Notwithstanding the vast scale of investments called for by the means of production and the transport services, the Plan also provides for immediate action aimed at ameliorating the living conditions and the social and cultural standard of the working population. The construction of a large number of workers' homes, hospitals, public nurseries, infant schools, and institutions of science and of art, and the installation of public hygiene (sewage and water mains, etc.) prove that the Three-Year Plan aims not only at the strengthening of the economy of the country, but also at the raising of the cultural and physical welfare of the working classes.⁹

The Development of the National Income Under the Influence of the Three-Year Plan

The results of the realisation of the Plan, e.g., increased national production and higher standard of living of the population, will be reflected ultimately in the various items of our national revenues. The planned control of agricultural, mining, and industrial production makes it possible to foresee the development of the main items of our national income. According to our estimates, the national revenue of Hungary, which calculated in terms of forint, represented 22.5 billion in 1938 and 14.7 billion in 1946-47, will amount to 19.0 billion in 1947-48, 22.4 billion in 1948-49 and 25.7 billion in 1949-50. In other words, we shall attain 84 per cent of the 1938 level in the first year, 99 per cent in the second, and 114 per cent in the third. In comparison with the 1946-47 figures, the increase will be one of 29 per cent in the first year, 52 in the second, and 74 in the third.

In agriculture, the respective figures for the gross production value make out 129, 141, and 151 per cent of the 1946-47 level; in other words, 90 per cent of the 1938-39 level will be attained by 1949-50. After deduction of maintenance and renewal costs and of the value of agricultural and industrial products, the contribution of agriculture to

⁹ Several sections on investments and estimates of agricultural, mining, and manufacturing production, and foreign trade, are left out.

the national revenue will amount to 5.1, 5.7, and 6.4 billion forint, respectively, during the three years, as compared to 6.8 billion in 1938-39, and 4 billion in 1946-47. Thus, in 1949-50, the contributions of agriculture will exceed the 1946-47 figure by 62 per cent and reach 95 per cent of the pre-war level.

The output of mining and smelting will represent a gross value of 113, 127, and 143 per cent, respectively, of the 1946-47 figure and will surpass the 1938 mark by 34 per cent in the last of the three years. The net contribution of smelting and mining to the national revenue will be of the order of 697, 770 and 853 million forint; in other words, it will have surpassed the pre-war level in the first year of the plan already and will stand 49 per cent above same in the third year.

The corresponding figures for manufacturing will show gross value of production as 135, 167, and 195 per cent of the 1946-47 period and will surpass the 1938 level in the last of the three years. Net production values should figure slightly more favourably in so far as rising production brings about a cut in the quota of used up materials and costs of maintenance. Manufacturing will contribute 5.8, 7.2, and 8.5 billion forint, respectively, to the national revenue, as against 6.5 billion in 1938 and 4.1 billion in 1946-47, which means that the portion of national revenue deriving from manufacturing will be exactly double the present figure, at the same time reaching 132 per cent of the 1938 level.

The contribution of the handicraft industry will also increase materially; by the end of the three-year period, it is expected to make out 166 per cent of the present level and thus slightly surpass the 1938 figure.

Since a considerable quantity of goods to be manufactured (e.g., goods to be delivered under the title of reparations) will not be placed on the market, the growth in the money value of commercial activity will not quite keep pace with that of the production of goods. This also applies partly to transport trade and to price-raising taxes. Similarly, the value of the use of lodgings and other items will increase only in a more moderate measure.

The rise in the standard of living to be attained by the realisation of the Plan will be determined, in the material sense, by such volume of goods produced as will remain available for inland consumption. (It must be recalled that the projected investments in the social, cultural, and public health sectors will sensibly improve living conditions; such improvement, however, cannot be measured numerically.) The value of commodities available for inland consumption can be arrived at by deducting from the total of national revenue the value of material requirements of the State and of autonomies, the amounts involved in connection with the discharge of international liabilities, and finally, the amounts of investments accomplished. The value of renewals is not

to be deducted, since they were taken into account when calculating the net production value of the individual branches of production. The goods-absorbing influence of exports may be left out of consideration during the period of the Three-Year Plan, because the equilibrium of our foreign trade balance will be maintained, and thus the exported goods will be replaced by imported ones. From this point of view, the increase of stocks of commodities would, in theory, have to be deducted from the national revenue, since it embraces goods barred from immediate consumption; the pace of the increase of stocks, however, depends on many and different factors. Consequently it can hardly be established numerically. The value in question may be put at 3,000 million forint, though it may well be considerably above or below this figure. In any case, the omission of this factor will involve no error of importance in the calculations on the advance in the standard of living, seeing that all stocks of commodities are, when all is said and done, accessible to direct or indirect consumption, only it is the prevailing purchasing power that will determine the pace of consumption.

Among the items to be deducted from the national revenue, the material expenses of a non-investment character of the State and other public bodies will not, during the Three-Year Plan, reach the 1938 level. This is to be explained by the fact that the material expenses of the State amounted in 1938—first year of the so-called “one billion pengoe investment plan”—to the relatively very high sum of 2,800 million forint. During the 1946-47 year, the expenditure under this heading of the State is expected to total 1,600 million forint. According to figures available for the period elapsed up to now, the said expenditure is to be gradually increased during the years covered by the Plan, since demands of this nature are not adequately met by present funds. With the falling away of the costs of occupation, international liabilities will, in the first year of the Plan, remain below the present figure; later, however, they will advance in keeping with the progressive growth of reparation deliveries. The accretion of live-stock is to be deducted in view of the fact that it has already been taken into account when calculating national revenue and that live-stock so accounted for will not be slaughtered.

After deduction of all items to be considered, the value of the volume of goods available for inland consumption—reckoned on the basis of retail prices ruling in January 1947—will amount to 14.0, 16.6, and 18.9 billion forint respectively during the three years covered by the Plan, as against 18,300 million for 1938 and 11,000 for the 1946-47 year. In other words, by the end of the period under the Plan, the value of goods available for inland consumption will surpass the 1938 level by 3 per cent and will stand 27, 51, and 72 per cent, respectively, above the 1946-47 level.

The standard of living of the farming population, and of the industrial and white-collar worker can and must be raised by a more fair distribution of the public charges. The consumers' tax and turnover tax, which place disproportionately heavy burdens on the small income classes, will have to give way in the greatest measure possible to a system of direct taxation more in keeping with individual earnings. The aim of the capital levy and the Plan Loan is to skim the larger incomes and to take the burden off the shoulders of those with modest means. In this manner, it will be possible for the present-day real incomes earned by the working population to be increased by 80 per cent by the end of the period covered by the Plan.

Real income is determined, in the case of the peasant population, by the purchasing power of money-incomes earned by the sale of agricultural products and measured in collation with the prices of industrial products, while in the case of operatives and office workers, by the ratio of the nominal earnings to the cost of living. It goes without saying, however, that the real income of the peasant population is also increased by higher crop yields, while in the case of physical and mental workers real income will tend to rise on account of improved employment. The above are the underlying considerations to the establishment of prices and wages if every group of the working population is to receive its due share for its efforts made towards the success of the Three-Year Plan. Such an improvement in the standard of living in so short a time is without parallel in the economic history of our country. This will induce everyone to take part in the realisation of our Plan in the sure knowledge that his work will bear fruit.

Man-power Management Under the Three-Year Plan

To reach the targets set by the Three-Year Plan, the man-power potential of the country must be administered both economically and systematically. Before the introduction of planned economy, intermittent periods of shortage and abundance of man-power perpetually endangered continuous production and threatened the livelihood of the workers. In contrast to that state of affairs, the provisions of the Three-Year Plan ensure the employment of an ever increasing number of workers according to a predetermined scale.

The switch-over of agriculture from a system of extensive to one of intensive cultivation confronts the management of man-power with previously inexistent problems. The so-called "latent unemployment," inherent with the extensive agricultural system adopted in Hungary, must be eliminated; thus the system which forced many hundred thousands of farm labourers and smallholders of eke out precarious existence on the earnings of only one hundred working days in the year must be finally liquidated. More complete and uniform use must be made of

man-power in agriculture too, and wages ensuring a decent standard of living must be paid. By extending the area sown with hoe-crops or fodder plants and by expanding the budding market-gardening industry, it will be possible for agricultural employment to be spread more evenly over the year. However, this in itself is not enough. The surplus man-power potential must be absorbed by encouraging the provincial population to participate in the processing of agricultural products and by the extensive development of the cottage industries. In some regions it will be necessary to provide for a number of workers to find seasonal occupation in agriculture during certain periods of the year and in other periods in the mining or factory industry or in the construction and maintenance of highways and canals. In addition, part of the surplus agricultural man-power will be absorbed by industrial production as soon as this has been geared up by the Three-Year Plan.

The production of mining and manufacturing industry as estimated in the Three-Year Plan requires an increase of the hands employed. However, this increase is not proportional, in all cases, to the rise in production. The number of certain categories of operatives engaged in key enterprises will not increase proportionally; rationalisation, which increases the output even without the use of more man-power, will also make its effect felt.

Examined from the angle of man-power management, rationalisation means on the one hand that the efficient manufacture of similar or identical consumption goods by factories dispersed in various parts of the country should discontinue; and instead, the centralisation of production and an increase of output coupled with the least rise of employment should be sought. On the other hand, within the works, the output per workers is to be raised to the optimum by the introduction and application of improved means of production and by the most rational arrangement of working processes, thus ensuring a more economical production.

The object of rationalisation is not to achieve a maximum, but an optimum, output. In other words, the object is the utilisation of man-power in a way that results not in increased demands on the worker, but on the contrary, in more careful treatment of same, by the application of more rational means of production simultaneous with a higher output. Obviously, this purpose can be realised only if each worker feels it his individual task to restore full workshop discipline. Neither rationalisation nor higher output can be achieved unless the operative fully appreciates the necessity of improved workshop discipline, a most important preliminary to the eventual success of the Three-Year Plan. Improved workshop discipline and increased output not only give the worker pride and confidence in his abilities, but also ensure him a secure social standing.

The number of workers employed in certain branches of the nation's economy—principally in the mining industry where out-dated production methods are still applied—will rise but slightly during the term covered by the Plan, as large-scale investments provided for will modernise production methods without the need to call on additional labour. On the other hand, in the case of industries where working methods and means of production may be considered more modern even today, the number of new employees called for will rise in proportion to the increased production.

According to the provisions of the Three-Year Plan, it is expected that the number of workers in the mining and factory industries will increase between 1947 and 1948 by over 10 per cent of the present figure, i.e., that it will be some 6.5 per cent higher than the 1938 level. This demand for additional labour can be met easily enough by drawing upon the present reserves of unemployed. While there are branches of industry where a shortage of skilled labour exists, it is expected that this shortage can be remedied gradually by teaching workmen new trades and by the suitable administration of available man-power reserves.

In the second year of the Plan, i.e., the 1948-49 period, it is expected that the number of operatives will increase by roughly 20 per cent over the present figure, or 15.6 per cent over the 1938 level. This target, however, can be reached only if the man-power is made to flow into carefully selected channels. While we must not forget to take into account the reserve of labour arising out of the repatriation of the prisoners of war, it will still be necessary to put to work everyone actually not engaged in productive tasks. Such, for example, are the dismissed or inefficiently directed and grossly underpaid employees of over-dimensioned public enterprises or firms or persons earning illegal profits as middle-men. People of this kind only cause the costs of living to rise. Once they have been given useful tasks, the total of productive working hands will increase and, and at the same time, the costs of administering public enterprises and business organisations will decrease and superfluous middle-men will be eliminated. As a result, the costs of living will fall.

By the end of the third year covered by the Plan, the number of operatives will exceed the present figure by almost 30 per cent. The material accretion of industrial output provided for in the Plan will cause industrial unemployment to vanish by the end of the 1949-50 year and will thus absorb part of the surplus of agrarian workers. Obviously, the drafting into industry of such large masses of new workers is feasible only if proper training is provided on the basis of a carefully thought-out plan.

Far-reaching rationalisation, in the first place, that of the man-

power reserves, is essential for all these results to materialise. Immense tasks have yet to be attended to in the field of the education of skilled workers and in that of providing for men to replace superannuated experts of higher qualification. The progress of the nation's economy along a predetermined course greatly facilitates the realisation of these aims as it will allow for the right estimation of the demands to be made beforehand and for adequate and timely plans to be prepared for exploiting man-power to the best advantage.

Development of the Price and Wage Level during the Term of the Three-Year Plan

The price and wage policy of the Three-Year Plan must be brought into line with the over-all objectives set by the scheme. In other words, provision must be made to ensure, as compared with 1938, the bridging of the gap caused by the agrarian shears and to further the rise of the workers' standard of living (their real earnings) by some 80 per cent during the three years. Closing of the agrarian shears and the increase of real incomes—in other words, the raising of the living standard of the entire population, whether the agricultural classes or the physical and intellectual workers—all this is made feasible by the fact, following upon the realisation of the Three-Year Plan, that the volume of goods available for inland consumption will surpass the 1946-47 average by a mean of 27 per cent during the first year, 51 per cent during the second, and 72 per cent during the third year under the Plan. Since the yearly average stands for the mean figure of the progressively rising standard of living during the relevant year, a rise of a great deal more than 72 per cent should present itself during the last months of the 1949-50 year. Moreover, it must not be forgotten that the burdens of State administration will, in the course of the execution of the Three-Year Plan, be distributed more equitably than is the case at present. As a result, it will be possible for the real value of wages earned and of the money incomes of the farming population to be increased by even greater percentages than those above, by 80 per cent towards the end of the third year.

Apart from this purpose that is the primary target of the wage and price policy to be adopted under the Three-Year Plan, we must not lose sight of the necessity to maintain at all costs the value of the forint in terms of stable currencies. This necessity in itself precludes the granting of State subsidies on exports, in the form of premiums or otherwise; measures of that nature would be tantamount to a form of devaluation. Under the Plan, Hungary will have to export a very considerably quantity of industrial commodities to be able to cover her requirements in raw materials. Such exports are greatly impeded by the present state of affairs in which the inland price of a number of industrial articles is

higher in Hungary than abroad. Consequently, if we desire to promote our exports of industrial commodities without State subsidies and without imperilling the exchange parity of the forint, the price level of these industrial commodities will have to be reduced gradually.

In so far as domestic relations are concerned, what we must aim at when realising our price policy is, on the one hand, to ensure the continuity and expansion of productive activity, and to ensure conditions underlying reliable planning on the other. From both points of view it is desirable to maintain the greatest possible stability of price levels. At no cost must a gradual increase in the price level be allowed to occur. Such an emergency would lead to the necessity of having ever and anon to adjust wages and salaries to the rising prices to secure the stability of real earnings; this would result in a state of permanent uncertainty in many segments of economic life. A scaling down of the price level, however, is quite permissible as one of the means of raising real earnings.

All the foregoing postulates require that the price policy adopted by the Three-Year Plan be aimed at the stabilisation, and indeed, substantial reduction, of wholesale and retail prices alike. While, with an eye to closing the agrarian shears, the price of agricultural commodities will have to be augmented proportionally to that of industrial commodities, this must not involve an increase of living costs either.

The projected rate of increase in the real earnings is higher than that of the lowering of prices to be reckoned with within the period of the Three-Year Plan. It follows, therefore, that the desired rise in real earnings can be achieved only partially by the reduction of the price of consumption goods; in part, normal earnings will have to be increased as well. We must not overlook the fact that any advance in the nominal earnings must not be permitted to cause an advance in retail prices; therefore, the gap between the prices obtained by the producer and those paid by the consumer must be narrowed in the case of both agricultural and industrial commodities. This can be achieved principally by excluding superfluous go-betweens and, secondly, by reducing the middle-man's commission. Furthermore, advantage must be taken where possible, of the price-reducing factors of the purchase and distribution of commodities by co-operative societies. Parallel to the rise in turnover and the reform of our taxation system, consideration must be given to the question of reducing somewhat the taxes affecting the prices of consumption goods.

Our present taxation system still bears the mark of the initial difficulties resulting from the stabilisation of the forint currency. It is based largely on the indirect taxes, such as consumer and turnover taxes; consequently it affects, and to an unjustly large degree, those very classes whose meagre earnings are devoted principally to the purchase of con-

sumption goods. The gradual introduction of a system of direct taxation and the imposition of progressive taxes on larger incomes will enable the treasury to reduce the rate of the consumer and turnover taxes and, in this way, to bring about a reduction in the gap between the price obtained by the producer and that paid by the consumer. However this, in itself, is insufficient. Stabilisation or reduction, respectively, of prices together with an advance of real earnings can be assured only if we succeed in reducing production costs simultaneously. This is why it is essential to the successful execution of our price policy that production be rationalised and production costs reduced consecutively, and also that there should be material increase of the output per worker.

The foregoing automatically presents us with the requirements that will have to be borne in mind when moulding the relative level of wages and prices as for August, 1947. The increase that has taken place already in the price of cereals was motivated by the disparity that had existed to the detriment of the price of cereals ever since the evolution of the stabilisation level. The increase of the prices of cereals was, at the same time, the first important step towards the attainment of one of the targets set by the Three-Year Plan, namely to bring about the disappearance of the agrarian shears in relation to the 1938 level. At the same time, we shall have to do away with the disparity that has existed since 1946 between the price of cereals and the price of other agricultural commodities, particularly animal products. It follows from the foregoing that minor rectifications can take place only in respect to the latter prices.

When studying the question of increasing the level of wages and salaries, the principle must be laid down that such increases must not be permitted to find expression in the retail prices of industrial products. Realisation of this principle will be made possible by a considerable increase in turnover following in the wake of the Three-Year Plan and, as a consequence, improved exploitation of the productive capacity, scaled-up efficiency per worker to be attained, and finally the absolutely essential rationalisation.

Where experience acquired since the introduction of the stabilisation makes it possible, prices will have to be reduced even prior to the introduction of the Three-Year Plan.

The Financial Implementation of the Three-Year Plan

The investments provided for in the Three-Year Plan were decided upon the assumption that the economic, social, and cultural rehabilitation of the country will have to be ensured even if we are left alone to our own resources. Nevertheless, there are also supplementary plans ready in the event that foreign loans on non-political terms are forthcoming which, no doubt, would speed up the process of recovery. The

character of these additional plans, however, is such that a postponement in their realisation would not affect the rise of production and the improvement of living standards as foreseen in the Plan. Our financial planning has also been drawn up on this conception and, for the present, is based solely on resources to be drawn from the inland production. According to our estimates, the national production will, within the first twelve-month period, already suffice not only to meet the basic demands of the population and to cover Hungary's international obligations, but will, in addition, yield a substantial surplus that will increase further in the subsequent years. It is up to the financial policy to cause these surpluses to accumulate in the shape of savings and be made available indeed for the purpose of the contemplated investments.

The Three-Year Plan provides for a total investment of 6,585 million forint to be divided among the following principal objectives:

<i>Destination</i>	<i>Total investments</i>	<i>1947/48</i>	<i>1948/49</i>	<i>1949/50</i>
		<i>value of annual investments in million forint</i>		
Agriculture	2,000.0	579.4	651.0	769.6
Mining and Manufacturing	1,745.0	554.0	599.0	592.0
Communications and Postal services	1,676.0	427.3	560.0	688.7
Building, social and cultural aims	1,164.0	235.3	375.0	553.7
Total:	6,585.0	1,796.0	2,185.0	2,604.0

Over and above the foregoing investments, further savings will be necessary in the interest of fostering production; for example, measures will have to be taken to ensure the rapid growth of our partially depleted live-stock aggregate and gradually to repair or replace worn-out tools, machinery, transport installations, etc., or to re-modernise obsolete building premises. Increasing production and turnover of goods will also require a rapid growth of working capital, which will find expression preponderantly in the rise of supplies of commodities. The plants will have to be provided with a volume of raw materials increasing from month to month, and we shall have to revert to the normal state of affairs when every plant disposes of stocks large enough to cover its requirements months ahead. The stocks of finished goods held by the factories and trade in general will increase parallel to the rising pace of production. All these factors will call for additional substantial savings which, however, do not come within the framework of the Three-Year Plan for reasons given below.

If the breeding potential of the present live-stock aggregate is ex-

exploited to the full, the increase of our live-stock capital should represent a sum of 1,100 million forint by the end of the coming year. This capital increase however will result from the peasants' marketing less live-stock than usual, every suitable animal being applied to breeding purposes. In this way the peasants will waive a certain amount of purchasing power and thus provide cover for the capital accretion; in other words, no special provision need be made on the financial side.

The capital accretion resulting from the building of houses for the rural population will surpass, by far, the amount allocated for this purpose. This is due to the circumstance that the value of the manual labour to be contributed by the peasants in building on their own account as well as that of building materials available on the spot—estimated as representing a value of between two and three hundred million forint during the three-year period—does not fall within the scope of finances.

In the same way, no provision need be made for renewals—valued at a total of 1,600 million forint—required by agriculture, mining, and manufacturing during the three-year period. The cost of these renewals will have to be covered from the price of goods produced, a circumstance which has been taken into consideration when determining the current prices.

Finally, no account has to be taken either of the value of the anticipated accretion of working capital and commodity stocks, respectively—assessed at 3,000 million forint—as the resulting demand for money will have to be covered by the growth of the note circulation following in the wake of increased production on the one hand and from the anticipated increase of deposits on the other. The increase of working capital during a given period will be determined primarily by the development of the note circulation and of the deposits.

The growth of national revenue estimated in the Plan will permit us, even with such pace of capitalisation, to provide the working masses with a continually increasing volume of consumption goods and to raise their real incomes in the measure foreseen.

Obviously it will be necessary, in the interest of the investments envisaged under the Three-Year Plan, for the Government to ensure that the volume of goods and money available be indeed applied to the realisation of the Plan and not withdrawn for direct consumption, for luxuries, or for enterprises yielding momentary individual profits but of no value in so far as the Plan is concerned. Where necessary, the supreme interests of the nation involved in the Plan must be safeguarded by the introduction of prohibitive or compulsory measures.

If a parallel is drawn between the past and the future, a very material change to the advantage of the working masses can already be registered in this field too. Hungarian industry owes its growth also

during the period between the two World Wars to compulsory thrift. However, the shape it assumed then was one in which the body of consumers was exploited for the profit of the great industrial capitalists. Customs tariffs, restrictions on imports, and cartel agreements kept the price of industrial commodities at an artificially high level; thus, what investments were indeed realised were financed by part of the profit made by private capital. What we aim at in the Three-Year Plan is the proportional distribution of the burdens; savings are to be ensured principally by way of taxation. The economically feeble are to be protected, whereas the wealthier classes will have to bear progressive burdens.

Very substantial surpluses are foreseen in the budgets of the State and the autonomies. These revenue surpluses ensure financial cover for 85 per cent of the investments foreseen in the Plan; in other words, the Plan is to be financed preponderantly from the State's and autonomous bodies' tax receipts, and from the yield of ordinary and special taxes. Since the stabilisation, the Government of democratic Hungary has already introduced stringent progressivity in our tax system; it has, in other words, moved in the direction of the realisation of fundamental social principles. Our tax system and improved tax administration ensure, as is also foreseen in the Three-Year Plan, that a material increase of receipts will take place concurrent with the rehabilitation of economic life. The tax returns for the past months have already—calculated on the basis of the whole year—surpassed the figure of 3,400 million forint. For the first year of the plan, the revenue on existing taxation is expected to amount to 3,840 million forint, i.e., to be only 12 per cent in excess of the present tax receipts. The anticipated current tax receipts for the second and third year are 4,350 and 5,000 million forint, respectively. These estimates are in keeping with the anticipated growth of inland production.

Apart from a more efficient collection of existing taxes, financial contribution to the Three-Year Plan will also be forthcoming from a capital levy and the imposition of radical taxes on war-time and inflationary profits; these measures realise one of the most important demands of the new democracies in the field of tax policy. By the imposition of these two new taxes, the wealthier classes will also assume their due share of the proposed investments. In the course of the coming three years, a revenue of roughly 1,700 million forint will have to be assured from this source. The scale of the capital levy and the profit tax must be strongly progressive. Only fortunes of at least 75,000 forint will be affected; the initial rate is 6 per cent. Payments shall be made in installments over a period of three years. Agricultural estates of less than twenty-five cadastral acres will be exempt from the levy.

A "Plan Loan" of roughly 900 million forint will have to be floated as partial cover for the Plan; this loan will be issued in half-yearly installments to make it possible for the savings of the public—also expected to accumulate substantially as a consequence of the Plan—to be "skimmed" and put to profitable use. Finally, use will naturally have to be made for the cover of the Plan of the surpluses estimated to amount to 500 million forint of State and nationalized enterprises and works. The above amount comprises also advances in connection with deliveries to be effected by State enterprises to foreign countries. Such advances are to constitute the greater part of the surpluses of the State enterprises in the 1947-48 year.

The State budget will have to be drawn up as follows in keeping with the above demands:

	<i>Three-Year Total</i>	<i>1947/48</i>	<i>1948/49</i>	<i>1949/50</i>
	<i>million forint</i>			
<i>Revenue:</i>				
Taxes and State monopolies	13,190	3,840	4,350	5,000
Special taxes	1,740	525	580	635
Plan Loan	860	190	290	380
State enterprises' surpluses	497	122	168	207
Total:	16,287	4,677	5,388	6,222
<i>Expenditure:</i>				
Personal expenses	4,100	1,150	1,350	1,600
Current material expenses	2,700	700	900	1,100
Investments	4,387	1,327	1,438	1,622
International liabilities	5,100	1,500	1,700	1,900
Total:	16,287	4,677	5,388	6,222

The States expenditure available for investments constitutes precisely two-thirds of the total investments of the Plan. The other public bodies, in the first place the Municipality of Budapest, the provincial autonomies, and, to a lesser extent, the social insurance institutes will have to participate in the realisation of the Plan with 1,176 million (18 per cent). In other words, 85 per cent of the total investments will be covered from tax receipts. Furthermore, one may count—with the expansion of the joint Hungarian-Soviet enterprises—on financial participation by the Soviet Union to the extent of 151 million forint (2 per cent), and on savings accumulating with the co-operative societies to a total of 280 million forint (4 per cent); the balance of 590 million (9 per cent) will have to be provided by private capital.

The following amounts derived from various sources will have to be made available annually for the purpose of investments:

<i>Origin of financial cover</i>	<i>Three-Year Total</i>	<i>1947/48</i>	<i>1948/49</i>	<i>1949/50</i>
		<i>million forint</i>		
State and State enterprises	4,386.9	1,326.5	1,438.1	1,622.3
Other public bodies	1,175.6	269.6	404.3	501.7
Contribution of the Soviet Union towards the investments of joint Hungarian-Soviet enterprises	151.1	42.5	53.1	55.5
Cooperative societies	280.5	36.0	90.4	154.1
Private capital	590.9	121.4	199.1	270.4
Total:	6,585.0	1,796.0	2,185.0	2,604.0

It follows from the present state of the nation's economy that the Government will have to launch the investments programme; only later on, with the gradual strengthening of economic life, will it be possible to increase the investments by the autonomies, cooperative societies, and private capital, simultaneously with a proportional decrease in the participation of the Government. During the first year, 73.7 per cent of the investments will be covered by the Government, 15 per cent by other public bodies, and only 11.3 per cent will have to be provided from co-operative and private sources, including in the latter, the participation of the Soviet Union as well. In the second and third years, Government participation will fall to 66 and 62.4 per cent respectively, while that of the autonomous bodies will rise to 18.6 and 19.3 per cent, and that of the co-operative societies and private capital to 15.4 and 18.3 per cent, respectively.

It will be necessary, in respect to each single item, to determine in detail at what time, from what source, and to what amount the cover for the envisaged investment is forthcoming. Within the frame of the Three-Year Plan there shall be drawn up a more detailed execution Plan for one year, and the context there of dealing with the budgets of the autonomies shall be inserted as a separate annex in the budget estimates of the State and of the public autonomies for 1947-48. Finally, a monthly execution plan shall be drafted taking into account the amounts currently available from other financial sources. It is the duty of the "National Planning Office" and the "National Planning Council" to direct the execution of the Plan in keeping with the existing possibilities without, however, losing sight at any time of the ultimate targets in view. In this way, the financial policy of the Plan will be flexible in the course of its everyday execution while, at the same time, admitting no compromise as regards the objectives envisaged for each single year.

How Shall We Realise the Three-Year Plan?

Our exposition would not be complete if it contained no reference to the fundamental legislative and structural conditions underlying the

implementation of the Three-Year Plan. Agreement has been reached in this respect, too, by the competent experts of the parties in the Coalition Government, and the necessary conditions have already been established.

The first and most essential step was the passage of a bill on the provisions of the Three-Year Plan. Only by means of legislation can the accomplishment of the Plan be secured with freedom from the vagaries of political turmoil, the furthering of the success of the Plan be made an imperative task for all citizens, and the Government be empowered to promulgate the necessary decrees of execution.

The law passed by Parliament states that an economic plan of three years, to begin on August 1, 1947, shall be drawn up in the interest of encouraging the economic and cultural rehabilitation of the country as well as of consolidating the democratic régime; such Plan should ensure the intensified application and rationalised use of productive energy and the coordination of the various branches of production in the interest of the masses. The law makes it binding for every Hungarian and every foreigner in possession of a working permit in Hungary to collaborate to the maximum of his powers and abilities in furthering the aim of the Plan and to place all moral and material means at his command in the service of the Plan. It goes without saying that these prescriptions apply equally to Hungarian legal persons (joint-stock companies, co-operative societies, etc.) and to foreign legal persons possessing assets serving economic purposes in Hungary.

The law authorises the Government to work out in detail and execute the Plan and provides for the setting up of a "National Planning Council" and a "National Planning Office" in the interest of the accomplishment of this work. The Government is further authorised to promulgate decrees necessary for the execution of the Plan. Finally, the law declares any contravention of such decrees and, in general, any obstruction of the accomplishment of the Plan, to be a criminal offence, thus making it possible to punish with the full rigour of the Law the enemies of the Hungarian people, enemies that might seek to thwart the aims of the Three-Year Plan.

The Government organisation necessary for the implementation and execution of the Plan consists of the "National Planning Council" and the "National Planning Office" created under the terms of the law to which reference has been made above. It is incumbent upon the "National Planning Council" to assert the opinion and will of the political parties forming the coalition and of the organisations representing the working masses. The members of the Council are appointed by the President of the Republic from among the representatives of the four political parties in the Coalition, the Trades Union Council, the National Agricultural Council, and the National Centre of Co-operative Societies. By

virtue of an interparty understanding, the Coalition parties are to be represented in the Council by an equal number of delegates from each party. The Council examines all questions affecting the execution of the measures provided for in the Plan as well as all details thereof, always bearing in mind the actual economic situation, and submits its respective proposals to the Government. The Council will not decide by vote upon the various problems submitted to it for examination. When all the different aspects of the case have been given careful and objective consideration, common agreement must be reached with the Council between all parties concerned. Should this prove unfeasible in respect to some question, the relative matter has to be laid before the Council of Ministers or, should the Council of Ministers so desire, before the Supreme Economic Council.

The "National Planning Office" shall provide for the practical realisation of principles laid down according to the foregoing procedure; in other words, it is incumbent upon the "National Planning Office" to elaborate the details and to direct and control the execution of the Plan. The "National Planning Office" will periodically frame detailed plans related to the various branches of State and administrative life. Final approval of the plans drafted shall be given by the Council of Ministers.

The "National Planning Office" is an organisation administered by but a small staff and is divided into general administrative, financial, agricultural, mining, industrial, commercial, transport, construction, and social-cultural departments. Experts with the highest qualifications have been invited to serve in the Planning Office. Their task cannot be compared to the scope of any office formerly existing in Hungary. The Three-Year Plan, as outlined in the foregoing, is but a framework which must now be filled with life; the targets at which it aims must be attained by conforming flexibly to the hundred and one ever-changing demands of everyday life. While the Plan allocates the yearly amounts to be spent on investments, in point of fact it will be necessary to frame detailed plans for every month. In other words, decision will have to be reached as to the purpose to which the actual financial and material surpluses can best be put within the frame-work of the Plan. It is the duty of the "National Planning Office" to exploit these possibilities fully and, at the same time, to keep constant watch that progress is being made towards the ultimate goals.

Supervision of the measures introduced for the realisation of the Plan is of no less significance. Control can be really effective only if it reaches down to each single enterprise. The managers of enterprises important from the point of view of the Plan, therefore, must appoint a "Plan Commissioner" from among their staff; it will be the duty of this person to supply the "National Planning Office" regularly with information as to progress made by the respective plant in furthering the aims

of the Plan or what, if any, are the obstacles which may present themselves.

An adequate financial organisation is also part and parcel of the carrying out of the Plan. In order to enable the Hungarian credit system to be equal to the new duties, i.e., to manage the necessary financial operations inexpensively, efficiently, and in every way in the interest of the masses, far-reaching rationalisation and the extension of absolute State control will have to take place in the banking business. As a rule, in every country that switched over to planned economy, the big financial institutes were nationalized. This has happened even in France, not to mention those countries whose economic structure is far more similar to that of Hungary; such, for example, are Czechoslovakia, Poland, Yugoslavia and Bulgaria.

It is an imperative necessity in Hungary, too, that the principal financial institutes should be nationalised and that the other banks be placed under strict State control. Nevertheless, nationalisation must be carried out in such a way as to ensure that neither the economic and financial life of Hungary nor her connections with foreign countries should be interfered with. This is why one of the very first tasks awaiting the newly assembled Parliament will be the nationalization of the National Bank of Hungary and of the two largest financial enterprises in the country—the Hungarian Commercial Bank of Pest and the Hungarian General Creditbank—and also of the other principal banks (those known as belonging to the first category of banking institutes). Only such part of the shares in the financial institutes will pass into the hands of the State as represents inland property. Former holders of the shares are to receive indemnity. The position of the shares forming the property of foreign share-holders is not affected. The financial enterprises to be nationalised are permitted to retain registry of their firms, their legal personalities, and their participations in other enterprises. Absolute State control over the credit system can be enforced in this manner, too. Naturally, all banking enterprises will be immediately subject to strict State control; in point of fact, Government commissioners have already been delegated by the Minister of Finance to all banks coming within the first category of registered banks. The Government commissioners will ensure that the activities of the financial institutes fit into the over-all economic and financial policy and that they are in keeping with the demands connected with the realisation of the Plan.

The understanding prevailing among the different political parties as to the execution of the fundamental provisions of the Plan ensures that the same will not remain a scrap of paper. The legal measures envisaged, the representation of the political parties in the "National Planning Council," the ability of the experts administering the "National Planning Office," the placing of the credit system under state

control and the collaboration of the "Plan Commissioners" will serve to enforce the determination of the people of Hungary as to the accomplishment of their economic and cultural uprising. (There follows a series of tables concerning investments, production, national income, consumption, and financial sources of investments under the Three-Year Plan.)

Chapter XIX

The USSR : A Planned Economy

Introduction

A STEADY succession of five-year-plans of the USSR, beginning in 1928, more than anything else has dramatized the appearance and increased popularity of the planned economy. According to official reports, industrial output in the USSR had expanded by 650 per cent from 1928 to 1940. We know now that the index numbers upon which these results are based had a strong upward bias. Nevertheless, the results have been striking. By 1940, the output of iron was 4 times that of 1913; of steel, $4\frac{1}{2}$ times; of coal, $5\frac{1}{2}$ times; of oil, $3\frac{1}{2}$ times; of raw cotton, $3\frac{1}{2}$ times; and commodity grains close to twice that of 1913. The objective of the Fourth Five-Year Plan (1946-50) is a rise of income from 138 billion rubles in 1940 (1926-27 prices) to 205 billion rubles in 1950, or a rise of 48 per cent above the 1940 level. (These will be spectacular advances, if achieved, following five years of all-out warfare.) In a speech of February 9, 1946, Premier Stalin announced plans which would take fifteen years or more to achieve, and which would yield annually 50 million tons of pig iron, 500 million tons of coal, up to 60 million tons of oil, and a total industrial output three times that of 1940.

This chapter is devoted primarily to the *Law on the Five-Year Plan for the Restoration and Development of the National Economy of the*

USSR for 1946-50. (Detailed plans for each of the sixteen republics are omitted.) Among the significant objectives listed are the rehabilitation and development of devastated regions, the recovery of pre-war levels of output in industry and agriculture, and ultimately significant advances beyond them, priority to the restoration and development of heavy industry and railway transport, promotion of agriculture and the industries producing consumers' goods in order to raise the national well-being of the people, encouragement of technical progress, strengthening of defense, accumulation of capital at a rapid rate, and an increase in productivity.

Stress is put especially upon investment. Over a period of five years, the centralized capital investment for rehabilitation and development of the economy is to be 250 billion rubles. It is not clear whether this is in 1926-27 prices or not. If we assume that national income in the five years were to be 850 million rubles (5 times the mean of 1940 and 1950 [planned] income), then the ratio of centralized investment alone to total income would be 30 per cent—a very large proportion, indeed, for a poor economy. If the capital outlay is at 1945 prices, its proportional percentage to 1945-50 income (again at current prices) is undoubtedly less; but the assumption then is also that prices had risen greatly since 1926-27. A doubling of machine tool production and the priorities for machine tools also suggest that resources are to continue to be diverted disproportionately to capital building. An examination of the rise in output of textiles, food products, and agriculture generally, for example, does not suggest the marked advances that are promised for machine tools, chemicals, synthetic rubber, electric power, and coal.

As in earlier plans, the emphasis still is on capital rather than consumption. And as before, the planners underline the importance of rising productivity, which they will achieve by better training of workers, more capital, advance of mechanization, introduction of the latest management methods, and an increase in the proportion of piece and bonus payments to total average payments. Incentive is not by any means frowned upon in the socialist state. Gains in productivity will, it is hoped, bring about increased supplies of consumers' goods, lower prices, and the termination of rationing—all factors to spur the interest in production.

Americans will be particularly impressed by the proposal to spend 106 billion rubles per annum by 1950 on social security, including state expenditures on education. Here again it is not made clear whether the prices are 1926-27 prices or current prices, but it is stated that the amount is 2.6 times that expended in 1940. And in the same section, the statement is made that 33.5 million persons in industry will receive 252 billion rubles pay in 1950. Obviously, this cannot be in 1926-27 prices, since *total* income in 1950 in 1926-27 prices is to be but 205

billicn rubles. Let us, then, assume that both social security payments and wages in industry are in current rubles. Social security would then account for 40 per cent of the pay received in *industry*. This is undoubtedly an excessive estimate. A similar proportion for the United States would require public outlays many times that of the annual expenditures of around \$5 billion.

The Fourth Five-Year Plan: Aims ¹

Principal Aims

As a result of the heroic efforts of the peoples of the Soviet Union and of its gallant Red Army an epoch-making victory has been won—Hitler Germany has been smashed and Japanese imperialism defeated. The USSR ended the war by completely vanquishing the enemy. This is the chief result of the war.

The victory of the USSR means, first, a victory for the Soviet social system; the Soviet social system has successfully stood the test in the fire of war and has demonstrated its supreme vitality.

Second, the victory of the USSR is a victory for the Soviet state system; the multi-national Soviet state has stood all the tests of war and demonstrated its vitality.

Third, the victory of the USSR is a victory for the Soviet armed forces, for the Red Army; the Red Army has withstood all the hardships of war, completely vanquished the armies of our enemies, and emerged from the war victorious.

This epoch-making victory could only be achieved because the whole country had been made ready for active defense beforehand. Three five-year plans of development of the national economy of the USSR were required in preparation for this tremendous task.

The Soviet Union created the material conditions which made it possible to prepare the country for active defense before it entered World War II by consistently carrying out the policies of the Communist Party, and, first and foremost, with the help of the Soviet policy of industrializing the country and collectivizing agriculture.

As a result of the successful realization of the program of the Communist Party with respect to industrializing the country and collectivizing agriculture, a socialist society has been built in the USSR.

The 18th Congress of the Communist Party of the Soviet Union (CPSU) in 1939 laid down the lines for a gradual transition from so-

¹ The Law adopted at the First Session of the Supreme Soviet of the USSR, March 18, 1946. *The Great Stalin Five-Year Plan for the Restoration and Development of the National Economy of the USSR for 1946-1950* (Information Bulletin, Embassy of the Union of Soviet Socialist Republics, Washington, June 1946), pp. 2-18, 32.

cialism to communism and set before the peoples of the Soviet Union the aim of overtaking and outstripping the principal capitalist countries economically, i.e., with respect to the volume of industrial output per head of the population.

The groundwork for the accomplishment of this main economic aim of the USSR was laid by the Third Five-Year Plan for the development of the national economy of the USSR, the principal assignments of which were being successfully carried out during the first three and a half years of the five-year plan period (1938-41) notwithstanding the fact that military operations were at that time taking place on the borders of the Soviet Union.

Socialist industry was making rapid headway—industrial output showed an annual average increase of 13 per cent. Big strides were being made in particular in the development of heavy industry. In the first three years of the Third Five-Year Plan the output of the means of production increased by more than 50 per cent, while the output of the machine-building industry increased by 75 per cent.

Industry was rapidly developing in the eastern regions of the USSR; in the Urals, the Volga area, Siberia, Central Asia and Kazakhstan, industrial output in the first three years of the Third Five-Year Plan increased by 50 per cent.

The cereal crop in 1940 amounted to 119,000,000 tons. One of the richest grain-growing areas of the Soviet Union was created in the eastern part of the country. The progress of agriculture was due to the policy of collectivization, which made it possible in the space of a few years to cover the whole country with large collective farms capable of employing up-to-date machinery and all the latest methods of agricultural science, and of supplying the country with ever larger quantities of agricultural commodities.

In the first three and a half years of the Third Five-Year Plan an immense program of construction work was carried out: capital construction amounted in value to a total of 130 billion rubles; some 3,000 state-owned mills, factories, mines, power stations and other enterprises were put into operation. More than one-third of the capital construction work in this period fell to the eastern areas of the USSR.

The growth of socialist industry, especially of heavy industry, the economic development of the eastern areas, and the accumulation of large state reserves helped to strengthen the economic and military might of the Soviet Union. In 1940 there were produced in our country 15,000,000 tons of iron, or nearly four times as much as in 1913; 18,300,000 tons of steel, or four and a half times as much as in 1913; 166,000,000 tons of coal, or five and a half times as much as in 1913; 31,000,000 tons of oil, or three and a half times as much as in 1913; 38,300,000 tons of commodity grain, or 17,000,000 tons more than in 1913; or 2,700,-

000 tons of raw cotton, or three and a half times as much as in 1913. With the help of socialist industry the reconstruction of the railways system was undertaken.

This was accompanied by a continual improvement of the living and cultural standards of the peoples of the USSR. There was a rapid influx of new contingents of skilled workers into national industry. Productivity of labor and national consumption rose. Wages likewise rose and the incomes of the collective farms increased. The network of cultural institutions expanded, the number of pupils of primary and secondary schools and of students of higher educational establishments increased, and the universal education of children was a practical reality.

The treacherous attack of Hitler Germany on our socialist motherland in 1941 put a stop to the peaceful constructive labors of the Soviet Union and interrupted the general economic advance and the rise in the standard of living of the peoples of the USSR.

The Great Patriotic War made it necessary to subordinate the entire national economy to the needs of the front, to the task of smashing Hitler Germany and her satellites. The national economy of the USSR was swiftly put upon a war footing. Industry was switched over to the production of munitions.

The modern large-scale industry which had been built up in the eastern regions of the country in the period of the five-year plans and the rapid re-establishment of over 1,300 large industrial plants which were evacuated to the eastern areas of the country, coupled with the new construction work undertaken, resulted in considerably enlarging and strengthening the powerful industrial base in the East of the USSR. By a supreme economic effort the evacuated plants were in the main already re-established in the early half of 1942.

The victory of the USSR in the Patriotic War was achieved at the cost of heavy sacrifice. The German occupants inflicted tremendous damage on our country. Notwithstanding the colossal losses and the arduous conditions of wartime, the war economy of the USSR showed a swift development in the course of the Patriotic War. In the early half of 1945 industrial output in the eastern areas of the USSR was twice as great as in the first half of 1941, while the output of the war industries was 5.6 times as great. In the four years of the war industrial output increased 3.6 times in the Urals, 2.8 times in Siberia, and 3.4 times in the Volga area.

The eastern regions of the Soviet Union grew and expanded during the Patriotic War into a powerful base of supply of ammunition, weapons, tanks, and aircraft for the Red Army.

The State Committee of Defense set up in the early days of the Patriotic War by decision of the Presidium of the Supreme Soviet of the USSR, the Central Committee of the CPSU and the Council of Min-

isters of the USSR, and headed by our great leader, Comrade Stalin, swiftly and resolutely mobilized all the forces of the people of the USSR to repulse the enemy. Owing to the tremendous organizational work performed by Party and Soviet bodies under the guidance of the State Committee of Defense, in a very short period a smoothly working and rapidly growing war economy was created, which ensured the supply of the necessary munitions to the Red army and the accumulation of reserves for the complete destruction of the enemy.

The Soviet state and the Communist Party effectively utilized the material potentialities thus created for the development of war industry. In the last three years of the war the tank-building industry turned out an average of over 30,000 tanks, self-propelled guns, and armored cars annually; the aircraft industry produced about 40,000 aircraft annually during the same period; the ordnance industry produced nearly 120,000 guns of all calibers, nearly 450,000 light and heavy machine-guns, over 3,000,000 rifles, and about 2,000,000 tommy-guns; the mortar-making industry produced in the period 1942-1944 an average of 100,000 mortars a year; in 1944 alone over 240,000,000 shells, bombs, and mortar bombs and 7,400,000,000 cartridges were produced.

The working class of the Soviet Union, by constantly improving methods of production, increasing the capacity of industrial establishments, building new plants and ensuring the uninterrupted movement of freight for the armed forces and the national economy, performed a supreme feat of heroic labor during the Patriotic War.

Socialist agriculture kept the army and the country supplied with food and industrial raw materials. This was essentially a manifestation of the vitality of the collective farm system and of the patriotism of the Soviet peasant.

The Soviet intelligentsia helped the workers and the collective farmers to develop industry and agriculture; they contributed to the advance of modern science under wartime conditions, and applied its achievements to the production of munitions for the Red Army.

Unexampled feats of labor heroism were accomplished by the devoted women and glorious youth of the Soviet Union, who bore the brunt of the work in mine and factory, on collective farm and state farm.

Just as the Red Army, fighting single-handed in a long and arduous struggle, scored a military victory over the fascist armies, so did the working people of the Soviet rear, in their duel with Hitler Germany and her associates, score an economic victory over the enemy.

The guiding and directing force of the Soviet people in developing the national economy during the Patriotic War and placing it on a war footing was the Communist Party, the Bolsheviks. Led by the Party of Lenin and Stalin, our entire multi-national Soviet people—the workers,

peasants and intelligentsia of the USSR—rallied to form a single fighting camp. The party welded together all the forces of the Soviet Union and concentrated all the material resources of our Soviet state for the purpose of beating the enemy.

Both the German and the Japanese imperialist invaders have been vanquished. Our country is now relieved of the menace of German invasion in the West and of Japanese invasion in the East.

The USSR has returned to the work of peaceful socialist construction interrupted by the treacherous attack of Hitler Germany.

Having effectively initiated, while the Patriotic War was still on, the economic rehabilitation of the formerly occupied regions, the Soviet Union, now that the war is over, is continuing to rehabilitate and further develop its national economy on the basis of long-range state plans, which determine and direct the economic life of the USSR.

The Supreme Soviet of the USSR declares that the principal aims of the Five-Year Plan for the Rehabilitation and Development of the National Economy of the USSR in 1946-1950 are to rehabilitate the devastated regions of the country, to recover the pre-war level in industry and agriculture, and then considerably to surpass that level.

For this purpose it is necessary:

(1) To give priority to the restoration and development of heavy industry and railway transport, without which the rapid and effective recovery and development of the entire national economy of the USSR would be impossible.

(2) To promote agriculture and the industries producing consumer goods in order to raise the material well-being of the people of the Soviet Union and to secure an abundance of the principal items of consumer goods in the country.

(3) To promote technical progress in all branches of the national economy of the USSR, as a condition for a powerful increase of production and a rise in the productivity of labor, which will necessitate not only catching up with but surpassing scientific achievement outside the USSR in the near future.

(4) To complete the post-war reconstruction of the national economy in 1946 and to utilize the productive plant of the war industries for the purpose of increasing the economic power of the Soviet Union.

(5) To further enhance the defensive power of the USSR and to equip its armed forces with up-to-date weapons.

(6) To attain a high rate of capital accumulation, fixing for this purpose the centralized capital investments for the rehabilitation and development of the national economy of the USSR in the five-year period at 250,300,000,000 rubles and putting into operation rehabilitated and new enterprises to a total value of 234 billion rubles (in 1945 estimated prices); also, to develop the building industry to the utmost,

paying particular attention to the introduction of up-to-date building machinery and the mechanization of building processes, as well as the creation of an industrial basis for the production of building machinery.

(7) To conduct rebuilding and new building in towns and villages and increase the housing resources of the country to the utmost possible extent; to adopt mass production of pre-fabricated houses, and to provide state assistance to workers, peasants, and intellectuals in building their own homes.

(8) To surpass the pre-war volume of the national income and of national consumption, for which purpose the food industry must be expanded to the fullest possible extent, consumer goods manufactured on a big scale, the incomes of the collective farmers increased, commodity exchange extended; and the abolition of the rationing system in the near future, to be replaced by a widely ramified and efficient system of Soviet trade.

(9) To ensure permanent staffs of workers for industry and transport by improving the organization of labor and providing better living and material conditions, and also to ensure a steady increase in the number of highly qualified technical personnel.

(10) To raise the productivity of labor by making the utmost of the 8-hour working day, by the all-round mechanization of heavy labor-using branches of industry, by extending electrification in the national economy and by intensifying production processes.

(11) To restore and enlarge the system of primary and secondary schools and higher educational institutions, and to improve the training of cadres for industry by extending the labor reserve training system and the training of new workers on the job.

(12) To improve the public health service; and to ensure new advances in Soviet culture and art.

(13) To increase the state material reserves and stocks in national industry in order to eliminate seasonal declines in production and to avert adventitious difficulties in industry.

(14) To strengthen the currency and improve credit arrangements in the national industry; to enhance the significance of profits and cost-accounting as an additional stimulus to production; to increase the profitability of all branches of industry by lowering costs of production; to induce business organizations to pay greater attention to mobilizing their internal resources, observing scrupulous economy and resolutely eliminating losses due to bad management and unproductive expenditure; to increase the proportion of premiums for the fulfillment and over-fulfillment of output programs in the total earnings of workers and clerical employees.

(15) To stimulate to the utmost the economic initiative of the Union Republics in rehabilitating and developing their productive forces,

to strengthen and expand to the fullest extent the economy of the republics within the general system of national economy of the USSR; to ensure the all-round development of the economy of the republics, of local industry and of the producer co-operative societies, especially with a view to increasing the production of food and consumer goods, the utilization of local fuel resources, the making of rolled steel and castings for local needs, the production of building materials and timber, metal articles and equipment for republican industries; consumer goods produced by the local industries and the co-operative societies must be entirely at the disposal of the given Union Republic, it being left to the discretion of the Council of Ministers of the republic to decide what proportion of these goods shall be retained for consumption within the republic and what proportion used for commodity exchange with other republics, the general state regulation of market prices being at the same time observed.

With these aims in view, the Supreme Soviet of the Union of Soviet Socialist Republics resolves:

To approve the Five-Year Plan for the Rehabilitation and Development of the National Economy of the USSR in 1946-50, drawn up by the State Planning Commission of the USSR and adopted by the Government of the USSR, and to define the assignments for this period as follows:

The Fourth Five-Year Plan: Plan for Increased Production and Development

Industry

Total volume of production of the industry of the USSR as a whole in 1950, i.e., the last year of the Five-Year Plan for the Rehabilitation and Development of the National Economy of the USSR, is fixed at 205 billion rubles (in 1926-27 prices) as compared with 138,500,000,000 rubles in 1940, which represents an increase in industrial output of 48 per cent as compared with the pre-war year of 1940. . . .

In conformity with the plan for the growth of production, total capital construction in the industry of the USSR for the period 1946-1950 is fixed at 157,500,000,000 rubles (in 1945 estimated prices).

(4) *Iron and steel.* In view of the fact that the development of this industry will to a considerable extent determine the rehabilitation and development of the whole economy of the USSR, the pre-war figure for the smelting of iron and steel and the production of rolled goods shall be exceeded in 1950 by 35 per cent. Extraction of iron ore shall be increased by 1950 to 40,000,000 tons, production of coke to 30,000,000 tons, neutral firebrick to 2,780,000 tons, and acid firebrick to 980,000

tons. Steel rail production shall be restored and developed to an output of 1,350,000 tons in 1950. The manufacture of iron pipes shall be increased to 1,500,000 tons in 1950.

In the five-year period, 45 blast furnaces with a total output of 12,800,000 tons, 165 open hearth furnaces, 15 converters, and 90 electric furnaces with a total output of 16,200,000 tons of steel; 104 rolling mills with a total output of 11,700,000 tons; and 63 coke batteries with a total output of 19,100,000 tons shall be rehabilitated or newly built and put into operation. New iron ore mines with an annual output of 35,400,000 tons shall be opened.

The iron and steel industry of the south shall restore its pre-war level of production of iron, steel, rolled goods, coke and iron ore. The iron and steel plants in the south of the USSR, including 17 of the bigger mills, shall be rehabilitated. Seven pipe-rolling and pipe-casting mills shall be rehabilitated.

The all-round development of the iron and steel centers of the Urals, Siberia, and the Far East is to continue. The building of the Nizhny-Tagil and Chelyabinsk iron and steel mills shall in the main be completed. The building of four iron and steel mills in the Urals and Siberia is to be continued. A new plant for the manufacture of electric steel shall be built to supply the requisite amounts of transformer and dynamo steel. An iron and steel mill shall be built in the Georgian SSR and a pipe-rolling mill in the Azerbaijan SSR. The construction of new iron and steel mills in the Kazakh SSR and the Leningrad area shall be started.

The Far East, Siberia, and the Transcaucasus shall create their own sources of supply of iron ore. The Krivoy Rog iron field, the Kamysheburun iron mines, the Lipetsk and Tula iron mines, and the Chiatyry and Nikopol manganese mines shall be rehabilitated and further developed. The extraction of iron ore in the Shoria Highlands shall be increased by 2,000,000 tons, and iron mines opened in the region of the Kursk magnetic anomaly. Long hauls of raw material for the iron and steel industry must be reduced, especially the hauling of iron ore from the Urals to the Kuznetsk Basin.

Geological surveying shall be extended, especially in the eastern regions of the USSR, in order to increase the commercial reserves of iron ore and other raw materials for the existing and projected iron and steel plants. Commercial iron ore deposits amounting to 1,680,000,000 tons, 100,000,000 tons of which are in Western Siberia, and manganese deposits amounting to 110,000,000 tons, are to be surveyed; industrial reserves are to be provided for the construction of new iron and steel mills in the North Urals, Siberia, the Kazakh SSR and in the region of the Kursk magnetic anomaly.

The production of thin cold-rolled sheet-iron is to be rehabilitated

in the South and expanded in the East; the production of lacquered tin shall be organized and the production of tinplate extended. There is to be an all-round development in the production of assorted steel shapes, low alloyed steels, precision alloys, and transformer and dynamo steel with low magnetic losses. The production of high alloyed steel for the manufacture of high temperatures and pressure boilers and turbines shall be increased.

Laborious processes involved in the work of blast furnaces, open-hearth furnaces and rolling mills shall be further mechanized, especially in rehabilitating the iron and steel mills in the South. Modern cranes shall be provided for the ore, coal, and coke yards of iron and steel mills and coke and chemical plants, and tip-trucks provided for the transport systems of mills and mines. Flame chipping of ingots shall be widely developed. Iron and steel mills shall be equipped with measuring and control instruments and devices for automatic operation. The use of oxygen-enriched blasts for blast and steel-smelting furnaces shall be introduced on an industrial scale.

The concentration of poor quality ores shall be developed, the production of concentrates increased and the preparation of raw materials improved to provide changes of more regular composition. The scrap sorting points and pig-breaking departments of iron and steel mills shall be equipped with machinery, and a number of new mechanized plants for the handling of scrap shall be built. The network of pipelines for the transmission of gas from coke ovens for industrial uses shall be extended.

(5) *Non-ferrous metal industry.* A high rate of increase in the production of non-ferrous and rare metals shall be effected by improving the work of existing enterprises, constructing new mines and plants, rehabilitating the enterprises in the formerly occupied regions, and by introducing up-to-date methods. In the five-year period the output of copper shall be increased 1.6 times, that of aluminum doubled, magnesium increased 2.7 times, nickel 1.9 times, lead 2.6 times, zinc 2.5 times, wolfram concentrates 4.4 times, molybdenum concentrates 2.1 times, and tin 2.7 times. The production of rolled non-ferrous metal, especially of complex alloys, shall be extended. The supply of ores for the non-ferrous metal industry shall be enlarged and improved and the present shortage in the supply of raw material for the lead industry remedied.

In the five-year period the capacity of the mines, concentration plants, and refineries of the copper industry is to be increased. The first section of a copper development plant in the Kazakh SSR shall be completed, and the first section of a new copper refinery in the South Urals built. A new electrolytic copper plant shall be built and started. The capacity of the aluminum mines and factories is to increase. Bauxite mines, two aluminum plants and an alumina plant shall be restored,

two new aluminum plants are to be built and started, and the capacity of the aluminum plants in the North Urals and in the Kuznetsk Basin increased. The first section of the alumina plant in the Azerbaijan SSR shall be completed for operation.

Nickel production by electrolysis is to be increased in two nickel plants. A new nickel plant is to be started, the existing zinc plants expanded, two zinc plants in the South of the USSR rehabilitated and a new zinc plant and a new lead plant built. The wolfram and molybdenum plant in the North Caucasus shall be rehabilitated and extended and the building continued of plants to be supplied from the surveyed wolfram and molybdenum deposits in Central Asia and Eastern Siberia.

The first sections of three new plants for the manufacture of rolled non-ferrous metal goods shall be built and started. The electrode plant in the Ukrainian SSR shall be rehabilitated and extended and a new electrode plant built in the North Caucasus. Two new plants shall be built for the production of high-grade hard alloys.

The industrial processing of new raw materials—nepheline and alunite—for the production of alumina is to be introduced. Stocks of industrial categories of copper, lead, bauxite, nickel, wolfram, and molybdenum ores are to be increased. Local sources of supply of raw material for the aluminum plants in the South and in Siberia shall be surveyed and preparations made for extraction. Extensive prospecting shall be undertaken for the discovery of new deposits of aluminum, nickel, wolfram, molybdenum, gold, and new rare metals with a view to building new mines and plants.

The complete utilization of all minerals contained in non-ferrous ores, including sulphur ingredients, will be provided for by adopting perfected methods of processing and by combining the production of non-ferrous metals with the manufacture of chemicals. All laborious processes in the extraction and refining of non-ferrous ores are to be mechanized and the automatic control and checking of technological processes introduced in concentration plants and refineries. The production of metallic magnesium by electrothermal methods shall be introduced on an industrial scale.

(6) *Coal industry.* Rapid expansion shall be provided for so as to increase coal output to 51 per cent above the pre-war level by 1950. Output of coking coal (in the Donets, Kuznetsk, Karaganda, Kizel, Pechora, Tkvarchali, and Tkviuli fields) is to be increased to 57,700,000 tons, the amount required to satisfy all demands of industry. The pre-war level of extraction shall be restored in the Donets Basin and by 1950 exceeded by attaining a total output of 88,000,000 tons.

New coal fields and regions shall be opened in Bureya in the Khabarovsk Region, in Ekibastuz in the Kazakh SSR, in Kuyurgaz in the Bashkir ASSR, and in Uzgen in the Kirghiz SSR, and the extraction of

coal from local fields in all regions of the country where there are deposits is to be developed to the utmost with a view to substituting local fuel for outside supplies.

Coal mines with a total capacity of 183,000,000 tons are to be put into operation in the 1946-50 period. The rehabilitation of the Donets Basin mines is to be completed by 1949, for which purpose 182 large pits with a total capacity of 67,700,000 tons will be restored and 60 new pits with a total capacity of 14,100,000 tons built. In rehabilitating and building coal mines priority shall be given to those producing coking coal.

In the five years from 1946 to 1950, the following new pits are to be sunk and put into operation: in the Moscow coal field, 66 pits with a total capacity of 18,800,000 tons; in the Kuznetsk Basin, 30 pits with a total capacity of 18,000,000 tons; in Karaganda, 17 pits and open-cut mines with a total capacity of 6,500,000 tons; in the Urals, 49 pits and open-cut mines with a total capacity of 19,000,000 tons; and in Central Asia, nine pits with a total capacity of 3,200,000 tons.

The Pechora coal field, a new source of supply for the northern section of the European USSR and Leningrad, shall be extended. In this region new pits with a total capacity of 7,700,000 tons shall be started. A coal industry shall be inaugurated west of the Dnieper and in the western regions of the Ukraine, where 13 pits and open-cut mines with a total capacity of 9,700,000 tons are to be put into operation. In the Caucasus 10 new pits with a total capacity of 3,200,000 tons shall be started, and in the Far East eight pits sunk with a total capacity of 1,250,000 tons.

Mine construction on the indicated scale shall be ensured by the large-scale adoption of modern industrial methods in the construction of mines, as well as of housing and public services in the mining settlements and by considerably contracting building time schedules.

In order to fulfill the program laid down for increased coal output and for coal mining development, as well as to raise labor productivity, the extensive mechanization of laborious processes in the coal industry, especially in the removal of coal and muck, shall be undertaken. The number of machines used in the coal industry shall be accordingly increased to three or four times the pre-war number. The manufacture of coal-mining machinery shall be expanded in the eastern and western regions of the USSR. In the five-year period 13 new machine-building plants shall be erected and put into operation and 16 plants producing mine machinery shall be rehabilitated or reconstructed. Metal and ferro-concrete propping shall be extensively used in the coal mines in place of wooden props.

One of the major tasks of the coal industry is considerably to improve the quality of coal by concentration, screening and the manufac-

ture of briquettes. Large-scale, technically up-to-date mechanized plants shall be established for the concentration, screening and briquetting of coal. By 1950 all coking coal requiring concentration (with more than 7 per cent ash content) and all power-house coal requiring concentration (with more than 10 per cent ash content) shall be treated mechanically; the concentration of brown coal shall be widely practiced. In conformity with this, the mechanized concentration of coal in 1950 shall be increased to 150,000,000 tons, comprising 53,000,000 tons of coking coal and 97,000,000 tons of power-house coal. Power-house coal shall be screened. The production of coal briquettes is to be organized on a large scale and the output brought up by 1950 to 7,400,000 tons.

For the realization of the program of mechanical concentration and briquetting of coal in the 1946-50 period, 271 coal concentration plants, with a total capacity of 175,000,000 tons per annum, shall be built and six plants with a total capacity of 9,000,000 tons rehabilitated; 26 coal briquette plants with an annual capacity of 10,000,000 tons are to be built, the manufacture of coal concentration equipment organized, and two new plants manufacturing machinery built, one in the Kuznetsk Basin and the other in the Donets Basin.

All newly-built pits must have concentration and screening installations, serving either individual pits or groups of pits. The rehabilitation and building of the coal concentration departments of the coke and chemical plants in the south is to be accelerated and new coal concentration plants built at iron and steel plants.

In the five-year period 765 sites shall be surveyed with a view to starting new mines and open cuts with a total annual output of 361,000,000 tons of coal, these to include 131 sites in the Urals, 135 in the Moscow field, 60 in the Karaganda field, 60 in the Kuznetsk field, and 140 in the Donets field. New districts and deposits of coking coal shall be prospected and surveyed in the Urals, and in the Donets, Kuznetsk, Karaganda and Pechora fields.

(7) *Peat extraction.* Peat output is to be increased to 44,300,000 tons in 1950, or 30 per cent above pre-war, and a big expansion provided for in the central and western regions.

Laborious processes involved in the extraction, drying, and stacking of peat and in preparatory and loading and unloading operations shall be mechanized. The more highly mechanized methods of extraction, such as by milling, dredging, and pressure hose, shall be developed, and the use of narrow-gauge car tracks extended.

By 1950 the output of peat briquettes is to be increased to 1,200,000 tons. A start shall be made on organizing the all-the-year-round extraction of peat, for which purpose plants for the artificial dehydration of peat shall be built.

Research work on the mechanization of peat extraction and on the

technological and chemical processing of peat shall be widely undertaken.

(8) *Gas production.* A new branch of industry shall be developed on a large scale on the basis of exploiting natural gases and the processing of coal, peat, and shale. By 1950 the output of gas from coal and shale shall be increased to 1,900,000,000 cubic meters and of natural gas to 8,400,000,000 cubic meters. Work on the underground gasification of coal is to be continued so as to attain an output of gas produced by this method of 920,000,000 cubic meters a year by 1950. Industrial enterprises for the conversion of coal and shale into liquid fuel shall be started. By 1950 the output of liquid fuel from coal and shale is to reach 900,000 tons.

Shale mines with a capacity of 9,400,000 tons in the Estonian SSR and of 3,000,000 tons in the Leningrad Region shall be rehabilitated or newly built for the purpose of starting an industry for the manufacture of gas from shale. Two plants for the hydration of coal and one for the production of synthetic petrol shall be built. In the five-year period shale gas and shale processing plants shall be built and started in the Estonian SSR and Leningrad Region, four new gasworks built, gas pipelines from Dashava to Kiev and from Kohtla-Jarva to Leningrad laid and put into operation, and the Saratov-Moscow gas pipeline completed.

(9) *Petroleum.* The industry must be rapidly restored and developed, so that the pre-war level of extraction and refining is reached in 1949 and exceeded in 1950. Maximum development of petroleum extraction and refining is to continue in the eastern regions—in the Urals, in the Bashkir ASSR, in the Volga Basin, on Sakhalin Island, in the Turkmenian SSR, in the Uzbek SSR, in the Kazakh SSR, as well as in the Ukrainian SSR. The proportion of oil extraction in the eastern regions in the total output of the USSR must be considerably increased. Provision shall be made for the rapid rehabilitation of the oil industry in the Caucasus—in Baku, Grozny, and Krasnodar.

Geological surveying and the preparatory work on new oil fields shall be developed to ensure the fulfillment of the indicated increase of output and to have completed surveying by 1950 of commercial reserves sufficient for no less than two or three years ahead. Provision shall be made for greater survey drilling and for increasing its share in the total drilling done.

High-speed methods of sinking wells and rotary drilling shall be extended, deep wells using pumps provided with improved equipment, and secondary exploitation methods introduced. Hermetic equipment shall be employed in the extraction, collection, and transmission of petroleum.

The production of high octane aviation gasoline shall be developed.

and the quality of gasoline for motors, kerosene for tractors, oil for Diesel engines, and lubricating oils improved. The quantity of oil products obtained from petroleum must be increased by reducing losses and introducing catalytic and other up-to-date methods of producing gasoline and industrial oil.

In the five-year period four oil refining plants and sixteen oil refining installations shall be built. Three oil refineries shall be rehabilitated to supply oil products to the agricultural and industrial regions of the South. New oil pipelines shall be built. The production of gas-black and lamp-black shall be expanded into a large-scale industry by considerably enlarging the plants.

The production of oil machinery, equipment, and measuring instruments shall be rehabilitated and greatly extended so as to meet the needs of the oil industry in full.

(10) *Electric power development.* The rebuilding and building of power stations must be conducted at such speed that the increase in power-producing capacity shall keep ahead of the restoration and development of other branches of industry. The power grid systems shall be provided with permanent reserve capacities to ensure an efficient supply of electric power and prevent power stations from having to work at lower frequencies. The output of electric power for 1950 is fixed at a figure 70 per cent above that of 1940.

The power stations in the formerly occupied regions shall be completely restored and the total capacity of the power stations of the USSR increased by 11,700,000 kilowatts in the course of the five years, bringing the total installed capacity up to 22,400,000 kilowatts by 1950.

The building of hydroelectric power stations shall be developed so as to effect the greatest possible increase in the proportion of electric power produced by hydroelectric stations in the total power produced. In the five-year period power stations with a total capacity of 2,300,000 kilowatts shall be put into operation.

Six hydroelectric stations, including the Lenin Power Station on the Dnieper, are to be rehabilitated, the building of 30 hydroelectric stations completed, the first sections of eight hydroelectric stations built and put into operation, and work on five big new hydroelectric stations begun. The surveying and drafting in preparation for the building of new power stations on the Dnieper and the Syr-Darya is to continue.

The work of rebuilding and building local hydroelectric stations shall be widely developed, use being made primarily of existing dams. Power capacities totalling one million kilowatts shall be put into operation in small hydroelectric stations.

The power stations and transmission systems of Moscow, the Donets Basin, the Dnieper Basin, Kiev, Kharkov, Lvov, Odessa, Nikolayev,

Sevastopol, Novorossiisk, Krasnodar, Grozny, Stalingrad, Voronezh, Bryansk, Kalinin, Minsk, Vilnius, Riga, Tallinn, and Petrozavodsk shall be rehabilitated.

Thirty-seven district power stations, now under construction, including 21 heat and power stations, shall be completed and put into operation. The lag of power-producing capacity behind the requirements of electric power in Moscow, Gorky, Ivanovo, and Yaroslavl is to be eliminated.

The fitting of individual automatic electric drives to machines is to be widely practiced, gradually to be superseded by machines in which the electric drive is incorporated as an integral part of the design. The use of electrical processes in the production of light and non-ferrous metals, steel alloys and chemicals and in metal treatment is to be extended.

In addition to electrical developments in industry more extensive use is to be made of electricity on the railways and in agriculture. Small hydroelectric, wind-driven, and motor-driven power stations using locomobiles and gas-generator engines are to be built in large numbers in the rural areas. Work on the extension of municipal heating in Moscow, Leningrad, Kiev, Kharkov, Sverdlovsk, and Rostov-on-Don is to be continued.

Extensive provision shall be made for the adoption of the latest equipment and processes in the power stations—high-pressure and high-temperature steam, perfected turbines for heat generating systems and the latest types of boilers, generators and high-tension apparatus. The automatization of the processes of power production and distribution shall be highly developed; priority shall be given to the complete automatization of hydroelectric stations.

Research work on the long-distance transmission of high-tension direct current shall be carried out and brought into practical use.

(11) *Machine-building.* By 1950 this industry shall have doubled its output as compared with pre-war. Priority shall be given to the rehabilitation and development of the manufacture of equipment for the iron and steel, power, coal and oil industries, the manufacture of electrical machines, railway rolling stock, motor vehicles, tractors, agricultural machinery, equipment for the building industry, equipment for geological survey work, special and complex machine-tools, foundry equipment, and equipment and instruments for the chemical industry.

By the end of the five-year period the output of locomotives shall be increased to 4,000, freight cars to 200,000 (in terms of two-axle cars), iron and steel mill equipment to 131,000 tons, steam turbines to 3,770,000 kilowatts, boilers to 540,000 square meters of heating surface, tractors to 133,000, metal-working machine tools to 94,800, motor vehicles

to 750,000, and motors to 800,000, including 10,000 exceeding 100 kilowatts.

The production of new and improved types of high-productive machines is to be introduced: multi-spindle machine-tools, automatic machine-tools, powerful stamping and die presses, forging machines, powerful electric excavators, devices for the automatic regulation and control of production processes and modern refrigerating installations. The production of the latest types of electric machines, transformers, condensers, high-frequency apparatus, automatic telephone exchanges, telegraph apparatus, radio transmitters, radio valves, photoelectric cells, rectifier tubes, distribution panels, mercury vapor rectifiers, welding machines, protection and automatic relays and high tension apparatus shall be introduced developed.

In rehabilitating production and introducing new types of machines the standardization of parts and assemblies shall be ensured.

Extensive use shall be made of modern production methods in machine-building, especially the mass production line; automatic production lines and multi-purpose machine tools, casting under pressure and in coquilles, automatic welding, designs incorporating stamped and welded parts, high-frequency tempering, electric heating, high-speed stamping and milling shall be widely introduced.

The big heavy engineering centers of the Donets Basin and the Urals are to be rehabilitated and developed. In 1946-50 a total of 405,000 tons of equipment for iron and steel mills shall be produced which will ensure the output of blooming mills, rail rolling mills, highly productive mechanized installations for drawing small section steel shapes and wire, and mills for the continuous rolling of thin sheets. Two heavy machine-building plants in the Donets Basin shall be rebuilt and the erection of a new heavy machine-building plant in the South Urals shall be completed. The building of a plant to produce crushing and pulverizing equipment shall be commenced in Western Siberia.

In 1946-50 steam turbines totalling 9,030,000 kilowatts capacity shall be produced and the output of turbines and boilers working at high pressure and high steam temperature as well as water turbines of medium and low power shall be considerably increased.

Four plants manufacturing power station equipment shall be rehabilitated. A new plant to produce medium and low-power steam turbines shall be built. The erection of two plants for the manufacture of water turbines shall be completed. A boiler plant shall be restored and three new boiler plants started.

The manufacture of locomotives and freight cars shall be developed on a large scale. By 1950 the output of long-distance steam locomotives shall be increased to 2,200, of long-distance Diesel locomotives to 300,

of long-distance electric locomotives to 220, and of freight cars to 150,000 (in terms of two-axle cars); the output of dump cars is to be greatly increased. The production of long-distance locomotives is to be resumed at three locomotive building plants.

The output of long-distance steam and Diesel locomotives, and steam and electric locomotives for the use of factories is to be newly organized in four machine-building plants. New locomotive works shall be built and put into operation. Four freight car works are to be rehabilitated. The building of three new freight-car works shall be completed, and the building of freight cars in the North Urals resumed.

The production of metal-working machine-tools shall be increased to 74,000 machines by 1950. The production of multi-purpose, special-purpose, automatic and semi-automatic machine-tools shall be developed. The output of multi-purpose and special-purpose machine tools shall be increased to 12,300 by 1950. The output of forge and press equipment shall be raised to two and a half times that of pre-war, heavy presses, hammers and forging machines taking the greater share. The output of standard tools and abrasives shall be increased. Eighteen machine-tools plants shall be rehabilitated. Two new plants for the production of heavy machine tools and three for the production of multi-purpose and special-purpose machine tools shall be built and put into operation.

By 1950 the production of electrical equipment shall be increased to two and a half times pre-war. The machine-building plants shall be supplied with all types of electrical equipment; and to the coal, oil, and iron and steel industries with heavy electric motors, safety motors and standard alternating current motors and electrical equipment; the planned schedule of railway electrification shall be ensured by the supply of high-tension equipment. The production of devices for automatic-regulation and control shall be considerably developed. Fifteen electrical machinery plants shall be rehabilitated or completed. A plant for the output of generators for turbines, a plant for the production of traction and crane equipment, two cable plants, a plant for the manufacture of cathode ray tubes and a plant producing electrical equipment for Diesel locomotives shall be built and put into operation.

In 1950 the output of motor vehicles shall be increased to 500,000, and a transition made to the mass production of new types of motor vehicles—trucks of greater carrying power and more comfortable and economical types of passenger cars. The production of gas-generator and gas-reservoir automobiles shall be resumed. The mass production of Diesel trucks and tip-trucks shall be organized. The building of three automobile plants and a plant for the production of low-power cars shall be completed; three new automobile plants shall be built and three exist-

ing automobile plants extended. The building of four automobile assembly plants shall be completed.

There shall be an increase in the manufacture of tractors and agricultural machinery, without which the rapid rehabilitation and development of agriculture would be impossible. The tractor plants shall be rehabilitated and new plants shall be built so that the output of tractors, primarily for agriculture, shall be raised to 112,000 in 1950. The mass production of Diesel-engined and gas-generator tractors shall be organized. Two tractor plants shall be rehabilitated, the building of three new tractor plants completed and a tractor plant in the Byelorussian SSR erected. The production of tractors shall be resumed in two plants which will be released from other commitments for the purpose.

The mass production of agricultural machinery—tractor ploughs, seed drills, cultivators, disc and colter tillers, combines and other harvesters, grain cleaners, machines for gathering industrial crops and grass seed, mowing machines, fodder preparation and processing machines, sheep shearing and milking machines, separators, refrigerators and other dairy equipment, water-supply equipment for stock farms, collective farm flour mills and apparatus for combating farm pests—shall be rehabilitated and developed. Nine plants for the production of agricultural machines shall be restored. The building of five plants for the production of agricultural machines and one for the production of harvester combines shall be completed and put into operation.

Shipyards and allied enterprises shall be completely rehabilitated, priority being given to the Leningrad and Nikolayev shipyards. New shipyards are to be built. Shipyards building river and seagoing vessels shall be restored and expanded.

The production of compressors and high-pressure chemical apparatus shall be expanded. The production of powerful compressors and oxygen-producing installations shall be organized for the purpose of extending the use of oxygen in industry and accelerating technological processes. The building and extension of factories in the eastern regions of the USSR producing chemical apparatus—centrifugal pumps, compressors and turbo-compressors—shall be completed.

The production of textile machines shall be increased to four times the pre-war level. The production of new technically improved machinery—high-speed roving frames and warping machines—shall be inaugurated. The production of long yarn ring-spinning frames and automatic looms, and of machines for the footwear and clothing industries, shall be developed, as shall also the production of machines for the food-processing industry, especially for the meat, milk, sugar and canning branches, and of equipment for flour mills and elevators. The production of modern machines, such as ammonia compressors, quick freezers, dry-

ing and extraction installations, vacuum apparatus, and canning installations shall be inaugurated.

The production of excavators, the latest building and road-making machinery, hoisting and transport equipment, loading and unloading machinery, and various types of equipment for mechanizing laborious operations shall be undertaken.

The production of measuring instruments for automatic regulation and control of industrial processes shall be greatly developed and the output of optical and electrical measuring instruments shall be increased by 1950 to seven times that of 1940. The production of electron microscopes for use in research institutions shall be organized. The production of instruments for geo-physical methods of surveying (magnetic, electric, and seismic) shall be undertaken, and they shall be extensively introduced into geological survey work for the purpose of accelerating and improving prospecting and surveying deposits of useful minerals. The production of geo-physical instruments for weather forecasting in the service of aviation, navigation, and agriculture shall be developed.

The mass production of new types of microscopes, apparatus for spectral analysis, cinema projectors and cinecameras, cameras, and binoculars shall be undertaken and developed in accordance with the latest advances in the sphere of optics. The mass production of improved and cheap motorcycles, bicycles, shotguns, radio receivers, clocks, watches, and gramophones shall be resumed and developed. The production of modern television receivers shall be organized. The large-scale production of refrigerators shall be organized.

(12) *Chemical industry.* In 1950 this industry shall produce 50 per cent more than pre-war. The chemical industries of the formerly occupied regions shall be rehabilitated, priority being given to the production of nitrates, phosphates, soda products and dyes. The production of mineral fertilizers shall be restored and by 1950 shall exceed the pre-war level—double for phosphates, 1.8 times for nitrates, and 1.3 for potash.

New branches of organic synthesis shall be established to process coal and use the by-products of the oil refineries.

The output of an extensive assortment of chemical products for the plastics, aniline dye, varnish and paint, pharmaceutical, and other branches of industry shall be ensured. The production of new types of plastics and synthetic pitches is to be organized. The production of synthetic dyes is to be extended and their variety improved as compared with pre-war by increasing the production of the best fast dyes.

Factories for the production of calcined soda with a capacity of 813,000 tons, caustic soda with a capacity of 278,000 tons, and superphosphates with a capacity of 2,720,000 tons are to be put into operation. Three soda plants shall be restored, the building of a soda plant in

the Urals shall be completed and work on the building of a new soda plant begun. Two aniline dye works, two varnish and paint works and three plastics works shall be built and put into operation.

New superphosphate plants shall be built and put into operation to work the phosphorite deposits at Kara Tau in order to reduce long hauls of mineral fertilizers. Three nitrate plants shall be restored to their pre-war capacity and new plants built.

The chemical industry shall be expanded by the introduction of modern technique, uninterrupted methods of operation and automatic regulation of production, and chemical processes in the nitrate, sulphuric acid, soda and aniline dye industries further intensified.

(13) *Rubber industry.* By 1950 the production of synthetic rubber shall be doubled, of automobile tires trebled, and of rubber footwear increased 1.3 times compared with pre-war; in the synthetic rubber industry the use of raw material other than food crops shall be extensively developed and by 1950 the share of rubber produced from non-food raw materials shall be 38 per cent of the total. By 1950 the output of regenerated rubber shall be increased to 56,000 tons. The production of natural rubber in the USSR shall be organized on a large scale.

The rubber industry shall be developed by means of the introduction of new raw materials and new techniques, automatic regulation of the production of automobile tires, acceleration of processes in the production of synthetic rubber, and the fullest possible mechanization of laborious processes in the production of rubber, motor tires and other rubber articles.

(14) *Building materials.* In conformity with the aim of fully restoring the economy of the formerly occupied regions and of further developing the eastern regions of the USSR, the building materials industry there shall be rapidly rehabilitated and expanded.

In the five-year period the pre-war production of the major building materials—cement, glass, slate, roofing and war materials—shall be greatly exceeded, this to be achieved by rebuilding the damaged enterprises and constructing new ones. By 1950 the production of cement shall be 1.8 times, glass 1.8 times, tiles four times, and slate double the pre-war figure.

The pre-fabrication of dwelling-houses and of standard component parts made of wood, gypsum, asbo-cement, and other materials shall be started as a new industry. Cement plants with a total annual capacity of 9,400,000 tons, glass works with a capacity of 40,000,000 square meters, slate quarries with a capacity of 332,000,000 sheets, plants for the manufacture of pre-fabricated houses with an output of 4,600,000 square meters of living space, roofing material with an output of 3,250,000 rolls of rubberoid and pergamin and 2,700,000 rolls of tarred felt, and plants for the manufacture of boilers with an output of 377,000

square meters and of radiators with an output of 6,200,000 square meters are to be provided. The production of heat insulating materials—mineral wool, wood-fiber sheets and facing materials of asbo-cement—shall be developed.

To ensure the fulfillment of the program of production of building materials, laborious processes shall be mechanized, especially in the cement industry where electric excavators, large capacity dump cars and grab cranes shall be introduced. Up-to-date equipment and processes shall be extensively introduced, especially the simultaneous dying and pulverizing of coal, highly productive rotating furnaces for the burning of clinker, improved methods of window-glass manufacture, and production-line methods in transporting and cutting glass.

(15) *Timber industry.* By 1950 the felling of trade timber shall increase by 59 per cent over pre-war and the output of sawed timber by 14 per cent.

Sawmills with a capacity of 6,000,000 cubic meters, plants with an output of 300,000 cubic meters of plywood and with an output of 7,500,000,000 boxes of matches shall be put into operation. The wood-working industry, especially the production of furniture, shall be restored.

The timber-felling area shall be increased, chiefly where the timber can be brought down for floating in the following river basins: the Northern Dvina and its tributaries, Pechora, Kama, Vyatka, Kilmez, Unzha, Vetluga, and Belaya; the felling of timber shall be increased in Western Siberia and the Far East. In the five-year period 17,500 kilometers² of timber transport roads for mechanical traction—6,500 kilometers of narrow-gauge railway, 2,500 kilometers of tractor roads and 8,500 kilometers of motor roads—shall be built in the lumber regions, mainly in the northern and northwest regions and the Urals (Kama Basin). By the end of the five-year period 70 per cent of the trucks and tractors used for hauling timber shall have been converted to the use of wood fuel. The proportion of permanent workers in the lumber camps shall be increased, so that, by raising labor productivity, these permanent workers shall perform 75 per cent of the total work involved.

The felling and hauling of timber in areas where hand labor predominates shall be converted into a highly-developed mechanized industry with a permanent staff of skilled workers. For this purpose the mass use of electric saws for felling and of trailer tractors for skidding timber shall be introduced. Seventy-five per cent of the total work in felling timber and carting it to the roads and 55 per cent of the transport of timber shall be mechanized. The laborious processes in floating timber—loading and unloading—shall be mechanized. The following shall

² One kilometer = .621370 miles.

be manufactured and delivered to the timber industry: 40,000 electric saws, 7,500 tractors for trailing logs to the roads, 4,500 tractors for skidding timber, 470 narrow-gauge locomotives with flat-cars, 14,000 trucks with trailers, and the requisite number of bulldozers. The normal working of these machines shall be ensured by enlarging the number of repair workshops.

The hydrolysis industry shall be developed: in 1950 the production of alcohol by hydrolysis shall be eight times greater than pre-war. New plants with a capacity of 7,000,000 decaliters shall be built for the sulphite-alcohol and hydrolysis industries, so as to ensure the complex processing of waste products from sawmills and pulp and paper mills for the manufacture of alcohol, albuminous yeast, core sand binders, and other chemical products.

A big wood-chemical industry shall be established, attention being paid primarily to increasing the production of acetic acid, acetate solvents, rosin and turpentine.

(16) *Paper industry.* The rehabilitation of the industry shall be completed by 1948 and its further development undertaken, so that by 1950 the output of paper exceeds the pre-war level by 65 per cent, provision being made for a far greater proportionate increase in the output of high-grade bleached paper. The demand for special sorts of paper for industrial uses must be fully satisfied, and the production of wrapping paper, parchment paper, and of paper articles for the general market greatly increased. The production of viscose cellulose must be greatly expanded so as to fully satisfy the needs of the artificial fiber industry.

New and perfected machinery shall be introduced, such as pulping machinery of high productivity and involving a minimum expenditure of electric power; the equipment of paper machines with suction rolls, and of high-speed paper machines with multiple power drive; up-to-date machinery for bark-stripping; high capacity furnaces for the regeneration of lye; automatic machinery for the various processes of pulp and paper making.

(17) *Textile and light industries.* The pre-war output of all branches of these industries must be recovered and surpassed.

The artificial silk and textile fiber industry shall be rehabilitated and developed so as to increase the output of artificial silk by 1950 to 4.6 times, and of textile fiber to 9.6 times the pre-war level.

The assortment and finish of fabrics, garments, knitted goods, and footwear must be definitely improved; the production of improved dress fabrics and suitings shall be increased, as well as that of mercerized, napped, jacquard, and extra-fast printed fabrics.

The capacity of spinning-mills shall be increased in the five-year period by 2,860,000 spindles, of the artificial silk industry by 102,000

tons, of the boot and shoe industry by 100,000,000 pairs, and of the stocking industry by 345,000,000 pairs of socks and stockings. The textile, stocking and knited goods, leather, and boot and shoe factories, as well as the plants for the preliminary processing of cotton, flax, hemp, and wool in the former enemy-occupied regions shall be rehabilitated.

The expansion of the cotton textile industry in Siberia and Central Asia begun before the war shall be continued. In the five-year period there shall be built and started cotton mills in Novosibirsk, Astrakhan, the Georgian SSR, the Altai Territory and Northern Kazakhstan, and the second section of a cotton mill in Eastern Siberia. The construction of cotton mills in Tashkent, Stalinabad, Ferghana, Ufa, and Chelyabinsk shall be completed and the building of a cotton mill in the Kuzbas started.

Six artificial silk mills shall be completely rehabilitated, three new mills built, and the construction of four artificial fiber plants completed.

A rubber sole plant in Western Siberia and stocking mills in Sverdlovsk and Tambov shall be built and started, and the boot and shoe factories in Leningrad and Rostov, the leather factory in Ostashkov, the rubber sole plants in Kiev and Kalinin, the bottle-making plant in Konstantinovka, the stocking mill in Vitebsk, and the spinning mill in Poltava shall be restored.

New and perfected machinery shall be introduced, such as single-process scutching machines, high-speed roving machines, spinning frames with extra-size bobbins, automatic winding frames, high-speed warping and sizing machines, piecing machines, broad automatic looms, photogravure, and bleaching machines in the textile industry, and stocking frames, hot vulcanization presses and automatic and semi-automatic machinery in the light industries. The production of synthetic tanning extracts and high-grade artificial leather must be developed to the utmost. Machine repair facilities must be increased and the normal repair of machinery in the textile and light industries resumed in 1946.

(18) *Food industry.* Measures shall be taken for the rapid restoration and development of this industry; the production of the pre-war range of stocks shall be resumed and quality improved.

By 1950 the pre-war volume of output of meat products, butter, vegetable oil, sugar, pastry, and confectionery and other food articles is to be exceeded.

The pre-war fish catch and output of the fish industry shall be reached by 1947, and in 1950 the fish catch shall be 1.5 times, the output of fresh refrigerated fish 1.8 times, and of boned fish three times the pre-war volume. Fishing shall be widely extended in the Northern and Far Eastern waters, especially off South Sakhalin, the Kurile Islands, and Kamchatka. The fish industry in South Sakhalin shall be improved

by the adoption of modern fishing methods and the reconstruction of the existing fish-processing plants.

The pre-war output of canned meat, milk, fish, vegetables, and fruits is to be greatly exceeded, and the output of frozen fruits, berries, and vegetables, of powdered milk and dried vegetables and fruits increased. The mass production of dietetic and children's foods, prepared lunches, prepared meat and fish products, food concentrates, and vitamins shall be organized, as well as the large-scale production of Soviet champagne and matured high-grade wines and beer. The better types of pre-war packing of food products to insure their preservation and quality shall be re-introduced and their use developed.

The rehabilitation of 92 sugar refineries, 144 distilleries, 24 canneries, and 68 mechanical bakeries shall be fully completed, and 10 sugar refineries, 7 distilleries, 9 canneries, and 39 mechanical bakeries built. Forty-one meat packing plants, 29 cold storages, 22 urban milk processing factories, and 8 milk-canning factories shall be rehabilitated or completed, and 36 new meat packing plants, 38 cold storages, 48 milk processing factories, 13 milk canning factories, and 1,200 mechanical butter and cheese factories built. Continuous-action butter-making machinery and automatic butter-wrapping machinery shall be widely introduced.

The capacity of the salt-making plants shall be increased to 1,400,000 tons per annum, the building of a new large salt mine completed in the Ukraine, and the capacity of the salt-making plants in the Urals, Kazakhstan, the Altai Territory, and the Irkutsk Region doubled.

The fishing fleet shall be built up to pre-war dimensions and then further expanded. One hundred and fifty trawlers shall be put into operation in the five years and 13 fish canneries and 30 cold storages built.

Flour mills and cereal-preparing plants shall be rehabilitated and new ones built. In the five-year period, granaries and elevators with an aggregate capacity of 6,400,000 tons are to be rehabilitated or newly built, the capacity of the flour mills to be increased by the end of 1950 to handle an additional 20,000 tons of grain per day, and the output of high-milled flour and cereal products of diverse types increased.

Measures shall be taken for the wide introduction in the food industry of continuous processes of production, the method of the continuous extraction of vegetable oil, the replacement of food fats in the manufacture of soap by adequate substitutes (synthetic fatty acids, rosin and naphtha), automatic control of production processes, fast-freezing apparatus and cold storage facilities. Laborious processes of production and loading and unloading operations are to be mechanized. Narrow-gauge railways shall be extensively built for the transportation of raw materials to collection points and sugar refineries.

(19) *Local industry.* Measures shall be taken to rehabilitate and

widely develop local state and co-operative industries in all the republics, territories, and regions.

The chief function of the local industries and industrial co-operatives shall be to produce consumer goods and local building materials and to manufacture harness, carts, sleighs, and simple types of horse-drawn and hand-operated machines for the collective and state farms. Measures shall be taken to ensure that the local industries and industrial co-operatives in all republics, territories and regions produce household utensils and articles of high quality and at cheap prices.

By 1950 local industries and industrial co-operatives shall increase the output of furniture 30 per cent, knitted goods 25-30 per cent, bricks 110 per cent, peat 64 per cent, and coal 77 per cent, as compared with pre-war.

The quality and assortment of articles produced by local industries and industrial co-operatives must be definitely improved. The network of shoe-making and garment-making shops, as well as shops for the repair of furniture and household utensils shall be restored and enlarged.

(20) *Industrial construction and installation.* The program of construction and installation for 1946-50 is fixed at 153 billion rubles, including 55 billion rubles for the Ministry of Construction of Fuel Industry Enterprises, the Ministry of Construction of Heavy Industry Enterprises, and the Ministry of Construction of Army and Navy Enterprises.

In order to insure the carrying out of the program of construction and putting into operation of industrial plants, the building industry must be expanded to the utmost and building organizations of the Union Ministries and the Union Republics strengthened.

Up-to-date building methods must be widely introduced, prefabricated building parts being utilized to the maximum and mechanization of building operations extended. By 1950 the proportion of mechanization of the building work planned for that year shall be as follows; earth excavation 60 per cent, rubble crushing 90 per cent, concrete-making 95 per cent, mortar-making 90 per cent, concrete laying 60 per cent, and paint work 50 per cent.

Sufficient plants shall be erected for the production of building and road-making machinery, the output of excavators shall be increased and the manufacture started and developed of up-to-date digging, road-making, hoisting, transport and loading and unloading machines and electric and pneumatic builders' tools, as well as of modern machinery for the production of building materials, building parts, structural steel, and woodwork.

Subsidiary facilities for the building organizations (quarries, repair shops, factories for the making of builders' requisites) shall be expanded. The mass production of prefabricated houses and building

parts shall be organized, and an industry started for the making of architectural materials and ornamentation.

Measures must be taken to insure that all construction work is carried out in accordance with properly approved technical plans and estimates.

(21) In conformity with the planned increase in production and the program of capital development:

(a) Productivity of labor in industry shall be raised 36 per cent by 1950 as compared with pre-war;

(b) Productivity of labor on construction work shall be raised 40 per cent by 1950 as compared with pre-war;

(c) Costs of production in industry shall be reduced 17 per cent by 1950 as compared with 1945, the quality of output at the same time to be improved;

(d) Construction costs shall be reduced by the end of the five-year period 12 per cent as compared with 1945.

Agriculture

(22) The farming and animal husbandry of the former German occupied regions shall be rehabilitated and developed and the pre-war level of agricultural production for the USSR as a whole exceeded.

In order to speed the maximum rehabilitation and further development of agriculture, measures shall be taken to strengthen the common husbandry of the collective farms and to improve the machine and tractor stations and state farms organizationally and economically.

(23) Total farm produce in the USSR as a whole shall be increased by the end of the five-year period 27 per cent above the 1940 figure.

Grain. With a view to improving the supply of food to the people and creating adequate reserve supplies of grain in the country, the production of cereals, especially of wheat and rice, and legumes, shall be increased. At the end of the five-year period the annual grain harvest shall be 127,000,000 tons, with an average yield of 12 centners per hectare [more than 3,000 pounds per acre].

Industrial crops. The total harvest of sugar beet shall be 26,000,000 tons, with an average yield of 190 metric centners per hectare [more than 103 thousand pounds per acre]; raw cotton, 3,100,000 tons, with an average yield of 18.4 centners per hectare [more than 5,000 pounds per acre]; flax fiber, 800,000 tons, with an average yield of four centners per hectare [more than a thousand pounds per acre] and an improvement in the average length; staple sunflower seed, 3,700,000 tons, with an average yield of 10 centners per hectare [more than 27 hundred pounds per acre]. The areas sown to hemp, high oil-content crops, tobacco and *makhorka* [a variety of tobacco] shall be rehabilitated and a considerable increase in yields effected. The raw material supply for

the manufacture of natural rubber shall be increased by enlarging the crop area and yield, by properly locating the cultivation of rubber-bearing plants and improving farming methods.

Animal husbandry. In the five-year period the number of horses shall be increased 46 per cent, of horned cattle 39 per cent, of sheep and goats 75 per cent, and of hogs three times as compared with 1945. Measures shall be adopted to develop those branches of stock-breeding which reproduce rapidly, especially poultry farming, which shall be expanded by building large numbers of incubator breeding farms.

Measures shall be taken to improve and develop meat and dairy farming and market gardening in the vicinity of Moscow, Leningrad, Baku, Kharkov, Kiev, the industrial centers of the Urals, the Donets Basin, the Kuznetsk Basin, Gorky, the towns of Siberia and the Far East, and other big towns to insure that a full supply of vegetables and a considerable part of the supply of meat and milk are produced locally; there shall be a general development of hot-houses and nurseries to supply the populations of towns and industrial centers with early vegetables and greens in the winter and spring period. The cultivation of individual and group allotments run by factory and office workers shall be developed and measures taken to improve yield, as well as to develop the breeding of cattle, poultry and bees by individuals.

The cultivation of potatoes in the vicinity of alcohol and starch and molasses plants and of other vegetables in the vicinity of the canneries shall be expanded.

Orchards, vineyards, and tea and citrus fruit plantations shall be rehabilitated. New orchards, berry gardens, and vineyards shall be laid out on collective and state farms and on the small holdings of collective farmers. The chain of fruit nurseries shall be restored and expanded, their work improved and fruit trees grown in all nurseries providing saplings for land and forest improvement.

(24) To provide for the plan of increased production, the expenditure on capital development in agriculture (centralized and non-centralized investments) is fixed at 19,900,000,000 rubles for the five-year period: this includes 8,800,000,000 rubles for the rehabilitation and development of machine and tractor stations, two billion rubles for irrigation and improvements, and two billion rubles to promote an increase in the herds of state farms. In addition to this the capital investments made by the collective farms themselves shall amount to 38 billion rubles for 1946-50.

(25) The most important task of agriculture in 1946-50 is the general improvement of crop yields and an increase in the gross harvest of agricultural produce to be effected by considerably improving farm methods and applying the latest achievements in agricultural science:

for this purpose the restoration and introduction on all collective and state farms of proper crop rotation, including grasses and legumes, the wide use of fodder varieties, especially clover and alfalfa, as well as perennial grains, also the timely ploughing and good tilling of fallow lands shall be ensured. There shall be a further improvement in selection and seed production; the production of perennial grass seed shall be developed on all collective and state farms sufficiently to satisfy the needs of the farms for planting in accordance with the established crop rotation. For the purpose of rapidly improving fields overgrown with weeds a proper system of cultivation shall be employed (use of ploughs with colters and the removal of stubble) and winter fallow carefully tilled.

High quality selected seed and improved selected local varieties of grains, legumes, oil-bearing, and other crops shall be provided; the policy of planting only those varieties that have been especially selected for given districts shall be universally adopted; new and more highly-productive varieties shall be propagated and introduced.

In addition to the use of local organic fertilizers (dung, peat) collective and state farms shall make more extensive use of mineral fertilizers. Industrial crops (cotton, flax, hemp, sugar beet, rubber-bearing plants, tobacco, tea, and citrus fruits) shall be insured a sufficient supply of mineral fertilizer, which shall also be supplied in larger quantities for other crops, especially potatoes and vegetables. The mass production of machines for applying fertilizer (fertilizer drills and dung spreaders) shall be organized. In 1950 the farms shall be supplied with 5,100,000 tons of nitrate, phosphates, and potash and 400,000 tons of powdered phosphorite.

The tree plantations laid out for the protection of collective and state farm fields in the steppe and wooded steppe regions shall be restored and new belts of rapidly growing trees (including fruit trees) and bushes (including berry bushes) planted; trees, including fruit trees, shall also be planted along ravines.

(26) For the purpose of restoring and further developing irrigation and drainage systems there shall be an increase in the five-year period of 656,000 hectares³ of irrigated land and of 615,000 hectares of drained land. The drainage systems in the Byelorussian SSR and in the Barabin steppes shall be restored and a drainage system built in the floodlands of the River Yakhroma.

The construction of the Kirov Irrigation System in the Hungry Steppe, of the Katta-Kurgan, Orto-Tokai and Tejan Reservoirs and the Nevinnomyssk irrigation canal shall be completed. The irrigation of the Kura-Araks lowlands, the Volga-Akhtubo floodlands and of lands for

³ One hectare = 2.471 acres.

the planting of rice in the Krasnodar region shall be extended. Simple irrigation systems shall be widely built in the vicinity of the larger towns for the development of irrigated market gardening.

The complete utilization of all irrigated lands by planting crops and plantations that require flooding shall be insured; they shall not be allowed to become salified or swampy; the formerly irrigated lands in Ferghana, the Hungry Steppe, South Khorezm, the Vakhsh Valley, the Mugan Steppe and other regions shall be brought under the plough. The operation of all irrigation systems shall be improved, the timely repair and cleaning of water collection and distribution systems and the economic expenditure of water shall be effected, attention being paid to the quantities and times for irrigating different crops; there shall be an increased amount of mechanization in building and cleaning irrigation channels. Drained lands shall be fully used for the cultivation of farm crops and the correct operation of the drainage systems shall be organized. The building of ponds and reservoirs on collective and state farms shall be renewed and extended for the planting of vegetables and other farm crops on irrigated lands; fish and water fowl shall be bred in the ponds.

(27) The mechanization of field work on the farms shall be restored and extended, for which purpose the tractors and agricultural machinery necessary for the application of scientific tilling, cultivation, and harvesting shall be provided. In 1946-50 no less than 325,000 tractors and agricultural machines to a total value of 4,500,000,000 rubles (at 1926-27 prices) shall be supplied to the farms.

In the five-year period 950 machine and tractor stations shall be built and every machine and tractor station shall be provided with subsidiary buildings and workshops for running repairs: the machine and tractor stations shall be provided with repair shops, the number of motor and machine repair plants shall be increased to 210, and the number of machine and tractor workshops equipped for heavy overhauls to 510. The machine and tractor stations shall be provided with staffs of permanent workers.

New and perfected machines shall be designed and supplied to the farms: improved tractors, tilling, sowing and harvesting machinery, straight-flow and self-propelled combines, combines with attachments for the separate gathering of straw and ears, beet-lifting combines, beet-loaders, cotton-picking machines, machines for the cultivation and lifting of vegetables, machines for the gathering of vegetable seeds, and tractor-drawn machines and implements. Designing work at agricultural machinery plants and research institutes shall be extensively organized as well as the government-supervised testing of tractors and agricultural machines.

The training of sufficient agronomists, engineers, livestock experts,

veterinary surgeons, land surveyors, and other specialists for the farms shall be ensured, as well as the training of skilled workers in the commoner trades for the machine and tractor stations, collective and state farms.

There shall be a further development in the use of electricity in the collective farms, machine and tractor stations, and state farms. Small hydroelectric stations shall be widely built in the rural areas, and where there are no water-power resources stations driven by locomobiles or gas-generator engines working on local fuel shall be built.

(28) *Animal husbandry.* The commonly owned fat and dairy stock shall be rehabilitated and the number of draft cattle increased on the collective farms of the formerly occupied districts: the common animal farming of the collective farms shall be developed in all regions, and on this basis the total number of fat and dairy cattle in the USSR as a whole increased in the course of the five-year period above the pre-war number.

State farms breeding thoroughbred animals, state thoroughbred propagation and distributing centers and thoroughbred departments of collective farms shall be rehabilitated and new ones built; breeds of stock shall be improved and shall be further perfected by the selection of the most productive animals and also by grading up with highly-productive sires so that by the end of the five-year period the collective and state farms will have considerably larger herds of thoroughbred, highly-productive stock. The correct distribution of cattle breeds by regions shall be ensured.

Cattle and dairy farming shall be fully restored and further developed; by the end of the five-year period the average milk yield per cow shall be raised 67 per cent as compared with 1945, and the fattening of cattle before slaughter extensively practiced.

In order to bring the herds of horses up to pre-war level, considerably larger numbers of colts shall be reared; the number of stud farms and collective farm stud departments shall be increased; the state stud farms shall be improved; the natural pasturing of herds shall be widely developed in the steppes.

Pig-breeding on the collective and state farms and by individual collective farmers' private small holdings shall be rapidly rehabilitated; the proportion of pork in the output of meat shall be greatly increased.

The breeding of fine and semi-fine fleeced sheep shall be rehabilitated and further developed, especially in the North Caucasus, the Ukrainian SSR, the Kazakh SSR, the Kirghiz SSR, Western Siberia and the Volga area, as shall also the breeding of sheep for caracul, long-haired pelts, and meat and fat in the regions in which they are common; by the end of the five-year period the annual wool clip per sheep shall be raised 30 per cent as compared with 1945.

Poultry departments shall be organized on all grain-growing collective farms; the breeding of poultry and rabbits by collective farmers, individual peasants and factory and office workers shall be developed to the maximum.

State help shall be given to collective farmers in acquiring cattle in accordance with the quotas permitted by the collective farm statutes.

(29) In order to effect a radical improvement in the feed supplied to cattle and to insure a good supply of hay, root crops, silage, and other succulent feeds, and to provide good pasturage, proper fodder crop rotations shall be introduced, first and foremost in the collective and state farms with a well-developed animal husbandry and on collective farms in the vicinity of state thoroughbred farms; harvests of fine quality hay shall be increased by timely mowing of natural and sown grass and by improving the meadows; cattle grazing shall be improved by correctly organizing the use of natural pastures; where saeter pasturing is practiced the erection of living quarters and subsidiary buildings and the sinking of wells shall be organized, and fodder grown on winter pastures to create a reserve; the area sown to fodder and silage crops shall be extended and their yield increased; the use of silage feed shall be extended and installations for this purpose, especially silo towers, shall be built; pig fattening shall be renewed and developed around the cities and industrial centers and pig-swill collecting points shall be organized at all starch and molasses plants, sugar refineries and wine-presses, to fully utilize the waste products of these enterprises.

Bee-keeping shall be extensively developed on collective and state farms, as well as among peasants and factory and office workers; measures shall be taken to increase the productivity of bee-keeping. The manufacture of hives, bee-keepers' equipment, and artificial combs shall be extended.

(30) In order to strengthen and develop the common husbandry of the collective farms measures shall be taken to increase their wealth, that is, their incomes, indivisible funds, buildings, cattle, equipment, and livestock, and also their reserve stocks, and seed and forage reserves.

Proper protection must be arranged for the common lands and property of the collective farms, and no breach tolerated of the collective farm statutes or of collective farm democracy, e.g., the election of the management boards of the collective farms and their accountability to the general meeting of farm members.

Labor productivity on the collective farms shall be increased by correctly organizing labor and strengthening and increasing the role of the work-day unit in distributing the collective farm income; the system of working brigades and teams on the collective farms shall be improved by the practice of individual and group piece-rates; the making of ad-

ditional payments to collective farmers for obtaining higher harvest yields, rearing young cattle and increasing their productivity shall be widely practiced.

Greater discipline shall be exercised by the collective farms in discharging their obligations to the state in respect to deliveries of farm produce.

(31) As regards the state farms, measures must be taken in the forthcoming five years to place them on an exemplary footing by considerably increasing the yield of crops and the productivity of livestock and the efficient use of tractors, combines and other machines, and by reducing the cost-price of farm products; the pre-war size of the herds of livestock shall be restored and by 1950 shall be exceeded: horned cattle by 16 per cent, sheep and goats by 32 per cent, and pigs by 28 per cent; the mechanization of field work on the farms and the chief processes involved in stock farming shall be completed; staffs of permanent workers shall be built up for the state farms; they shall be provided with small holdings, and state aid shall be granted to assist them in building their own houses.

(32) For the purpose of rehabilitating and improving agriculture, extending the cultivated areas, raising the harvest yield and ensuring an increase in the number and productivity of livestock on the peasant farms of the Lithuanian, Latvian, Estonian, and Moldavian Union Republics, and the western districts of the Ukrainian and Byelorussian SSR, the peasant farms shall be helped in their work by strengthening the agricultural cooperatives, extending the chain of machine and tractor stations and machine and horse hiring centers, by granting credits, by increasing the supply and sale of farm machines and mineral fertilizers, and by organizing farms to rear thoroughbred cattle.

(33) In order to restore and develop forestry and the afforestation of denuded areas in the regions that were occupied by the Germans, afforestation and the surveying and registering of forests shall be carried out over an area of 123,000,000 hectares; the provision of stocks of seed and the organization of nurseries growing saplings shall be greatly developed; measures shall be adopted to protect and improve the forests in the steppe regions where they are of great importance to the farms and for water conservation.

(34) The work of agricultural research institutes shall be improved and their main task shall be to recommend measures for promoting progress in farming, stock-raising, and other branches of agriculture in the various agricultural zones of the USSR.

Soviet agricultural science shall be further developed and research work improved in the field of the mechanization, electrification, economics, and organization of agriculture.

Transport

To satisfy the growing needs of the national economy in the transportation of goods, the following tasks are laid down.

(35) *Railway transport.* Average daily freight-car loadings in 1950 are set at 115,000, and total freight carried in the year at 532 billion ton-kilometers [330,568,840,000 ton-miles].

The railways shall be fully restored in the formerly German-occupied regions. The pre-war traffic capacity of the following lines shall be exceeded: Donbas-Center, Donbas-Krivoy Rog, Donbas-Volga, the lines leading from the Caucasus, Moscow-Leningrad, Moscow-Kiev-Lvov, Moscow-Smolensk-Minsk-Koenigsberg, and Moscow-Velikiye Luki-Riga.

The industries of the Urals and Siberia shall be ensured full and uninterrupted transport facilities.

The major railway lines shall be technically re-equipped and their regular functioning in winter ensured, primarily by the use of electric and Diesel locomotives.

Rolling stock shall be increased by the addition of 6,165 long-distance steam locomotives, 555 long-distance electric locomotives, 865 long-distance Diesel locomotives, 472,500 freight cars (in terms of two-axle cars) and 6,000 passenger coaches. Automatic brakes shall be fitted to 93 per cent of all freight cars and automatic couplings to 75 per cent. Damaged rolling stock shall be fully repaired and repairs to locomotives and cars improved.

The turnover (loading-to-loading time) of railway freight cars shall be reduced from an average of 10.9 days in 1945 to an average of 7 days in 1950, and the average length of railway hauls from 790 kilometers in 1945 to 690 kilometers in 1950; the standing time of cars on factory spur lines shall be reduced to the utmost.

Capital investment in railway development is fixed in the sum of 40,100,000,000 rubles for the five-year period.

The rehabilitation of the following railways shall be completed by 1948: the lines in the Donets coal field and the Krivoy Rog iron field and the lines connecting Moscow with the Donbas and Leningrad with the Caucasus—a total length of 15,000 kilometers. On the formerly occupied railways 1,800 large and medium bridges shall be fully rebuilt, including those over the Rivers Dnieper, Don, Dniester, Neva, Niemen, Western Dvina, Volkhov, and Southern Bug. One thousand five hundred railway stations, round-houses with accommodation for 1,300 locomotives, and 128 car repair shops and centers shall be restored or newly built.

New lines are to be built in the five-year period to a total of 7,230 kilometers, including the Stalinsk-Magnitogorsk trunk line. Secondary

tracks to a total length of 12,500 kilometers shall be built or restored. Lines totaling 5,325 kilometers shall be electrified, and automatic block-signaling systems installed on 10,400 kilometers of track.

There shall be a further development in the technical equipment of railway stations and junctions: 21 mechanized shunting humps shall be built or restored.

On existing railways 50,000 kilometers of new rails shall be laid, including 3,000 kilometers for reconstruction of tracks, and 29,000 kilometers for capital repairs.

The locomotive and freight-car repair shops destroyed during the occupation shall be rebuilt, and 11 new shops for the repair of steam locomotives, 1 for the repair of electric locomotives, and 1 for the repair of Diesel locomotives, 11 car repair shops and 3 plants for the manufacture of spares, shall be built.

In 1946-50 houses with a living space of 5,500,000 square meters shall be made available for occupation by railway workers.

In 1946-50 the railways shall be supplied with 4,500,000 tons of rails, 2,000,000 tons of rail fastenings, 185,000,000 ties; and the production and laying of heavy rails shall be begun.

Mechanized loading and unloading on the railways shall be increased to 75 per cent of the total.

Spur lines in the former German-occupied regions shall be restored, existing spur lines shall be reconstructed and new ones built, especially for the enterprises in the Urals and Siberia, and the work of the transport departments of industrial enterprises shall be improved.

(36) *Inland water transport.* In 1950 the freight carried on the inland waterways shall be increased to 38 per cent above that of pre-war.

Inland water transport systems in the formerly occupied regions shall be fully restored, and by 1948 all vessels, ports and wharves shall have been rebuilt on the Rivers Dnieper, Pripet, Don, Kuban, Niemen, Western Dvina, and Svir, and on Lakes Ladoga and Onega, and the freight carried in these regions brought up to the pre-war level.

Better use shall be made of the Volga and its tributaries and of the Siberian and northern rivers; the turn-around of self-propelled and towed vessels shall be accelerated, the delivery of goods shall be speeded up and the use of towed vessels shall be on an average 25 per cent greater than in 1940.

Existing river ports and wharves shall be improved, the loading and unloading of river vessels shall be completely mechanized, and by 1950 all loading and unloading work shall be mechanized 75 per cent; river ports and wharves shall be equipped with mechanical hoisting and hauling machinery (cranes, electric cars, hoists and transporters).

The Stalin White Sea-Baltic Canal shall be rebuilt and work shall begin on the reconstruction of the Mariinsk waterways: by 1950 the

total length of navigable inland waterways shall be increased to 115,000 kilometers.

In the five-year period the self-propelled vessels of the river fleet shall be increased by 300,000 horsepower and the capacity of towed vessels by a further 3,000,000 tons.

Five shipyards shall be built and the production of ships' engines, subsidiary machinery, and equipment organized to supply them; advances in shipbuilding technique shall be applied in the building of river craft.

Yards for the building and repair of wooden vessels shall be adequately equipped with machinery; a supply of high-quality timber shall be insured for the building and repair of river craft.

In the constituent republics small rivers shall be adapted for the carriage of freight, and the building of self-propelled and towed vessels shall be organized.

(37) *Merchant marine.* By 1950 seagoing freight carriage shall be increased to 2.2 times that of pre-war.

The mercantile fleet shall be increased by 600,000 tons, including 400,000 tons of self-propelled craft and 90,000 tons of towed craft.

The seaports on the Azov, Black, and Baltic Seas shall be completely rehabilitated and the construction of ports in the Far East completed. The rehabilitation of the harbors shall incorporate the latest advances in construction technique.

The freight-handling capacity of the ports shall be increased by improving the port layout, mechanizing loading and unloading, and internal warehouse operations, increasing the number of gantries and travelling cranes and using better types of port transport machinery (tractors, lift-trucks and motor timber carriers).

The number of deep-water piers shall be increased 1.7 times as compared with 1940; the major seaports shall be deepened to accommodate big ocean-going vessels.

The ship repair yards on the Baltic and Black Seas shall be completely restored. Three new ship repair yards shall be built. In 1950 the repair yards shall have a capacity equal to 2.5 times that of pre-war, and the number of dry docks and slips for repairs increased to 1.8 times that of 1940.

Domestic building of deep-sea merchantment shall be increased in 1946-50 by building two shipyards, one on the Black Sea to build seagoing freighters and one on the Baltic to build trawlers and seagoing tugs.

The conversion of the Northern Sea Route into a normally working sea lane shall be completed by 1950.

(38) Soviet shipbuilding shall be greatly developed. In 1950 the tonnage of ships built shall be double the 1940 figure. The building of a

strong and powerful navy for the USSR shall be insured. New vessels and bases shall be built for the Soviet Navy.

(39) *Motor transport and motor roads.* In the five-year period the country's stocks of motor vehicles shall be increased to double those of pre-war. Diesel engines, high-compression gasoline engines, gas-reservoir and gas-generator automobiles using local types of fuel, and dump trucks shall be widely used.

The use and servicing of motor transport shall be improved; empty runs and idle standing shall be greatly reduced; passenger and goods taxi services shall be developed; the use of trailers and containers for the transport of goods shall be extended; an adequate number of repair shops shall be provided for motor transport vehicles; the manufacture of garage equipment and tools shall be developed.

The inter-district transport of heavy loads by road shall be organized; rail transport for short hauls shall be replaced by road transport.

The network of improved motor roads under Union and Republic jurisdiction shall be increased by 11,500 kilometers in the five-year period.

The existing network of arterial roads shall be restored and completely overhauled.

(40) *Air transport.* The civil air fleet shall be built up with modern passenger and goods transport planes; the air line network shall be enlarged to 175,000 kilometers. Air lines shall be rehabilitated and developed, primarily the major routes connecting Moscow with the capitals of the constituent republics and regional centers and the air lines in the North, Siberia, and the Far East. Local air lines shall be restored and developed to connect the centers of the constituent and autonomous republics with outlying districts.

The All-Union air lines shall be technically equipped to work all the year round and the major lines equipped for night operation. Sixteen airports shall be restored and adapted for modern heavy and high-speed transport planes. Twenty buildings for passenger accommodation shall be restored or built at existing and projected airports.

The use of specially adapted aircraft to combat farm and forest pests, for use by the public health service, and for geodetic surveying shall be developed on a large scale.

(41) *Communications.* Communications, especially radio and trunk cables, shall be fully restored and developed in the formerly German-occupied regions by the introduction of up-to-date equipment. In furtherance of the general project for the development of the communications of the USSR, reliable telephone and telegraph communication shall be installed between Moscow and all republican, territorial and regional centers, and between the capitals of the republics and their

regional centers; telephones shall be installed in all district centers, village soviets, machine and tractor stations, and state farms.

Seven thousand eight hundred kilometers of trunk telephone and telegraph cables shall be restored or newly laid. Fifty thousand kilometers of overhead non-ferrous metal wires shall be laid; trunk communication lines shall be equipped with modern high-frequency apparatus.

Fifty-five radio telegraph and telephone transmitters shall be erected, including 20 in the central regions for improved communications with the Far East, Kazakhstan, Central Asia, and the Transcaucasus.

The capacity of telephone exchanges shall be increased and special attention paid to the introduction of automatic telephone exchanges.

Radio broadcasting shall be further developed, 28 new broadcasting stations being erected and the radio diffusion network increased by 75 per cent compared with pre-war.

The television center in Moscow shall be restored and technically re-equipped and new television centers built in Leningrad, Kiev, and Sverdlovsk.

The postal services shall be generally improved; 5,000 new post offices shall be built in rural areas, and motor and air transport shall be widely used for the delivery of letters and newspapers.

The Fourth Five-Year Plan: Plan for the Material and Cultural Advancement of the People

(1) As a result of the measures to expand production, extend trade and increase the expenditure on housing and the cultural and social services, the pre-war standard of living of the people should not only be restored in the five-year period but the national income increased 30 per cent above the pre-war level.

The national income in 1950 (in 1926-27 prices) is projected at 177 billion rubles, with a corresponding increase in the totals of accumulation and consumption.

(2) *Labor and the training of industrial personnel.* The number of workers by hand and brain engaged in the national industries of the USSR in 1950 is projected at 33,500,000 persons, and the total payroll at 252,300,000,000 rubles. Prices for all goods shall be consistently reduced and housing and the cultural and social services improved. With the growth of productivity of labor, the average annual earnings per worker by hand and brain engaged in the national industries of the USSR shall increase by 1950 to 6,000 rubles, which is considerably above the 1940 level.

With a view to attracting labor to the key industries and creating staffs of permanent employees, higher remuneration shall be provided

for workers, engineers and technicians in the various branches of heavy industry (coal, iron and steel, oil).

The progressive piece-rate system of the payment of workers, as well as the system of bonuses for engineers and technicians for fulfillment and over-fulfillment of output programs, shall be perfected, the proportion of bonuses to wages and salaries being systematically increased.

Suitable technically calculated norms of output shall be more widely introduced in industry, due account being taken of up-to-date technological methods and the increased mechanization of labor. The calculation of norms shall be intrusted to qualified engineers and technicians. Measures shall be taken for the further improvement of the conditions of labor in industry (safety devices, ventilation, illumination, sanitation).

With a view to supplying adequate numbers of skilled workers for the major branches of the national economy and improving the technical training of industrial personnel, the annual graduation of young skilled workers by the factory, trade, and railway schools shall be increased to 1,200,000 pupils, and the state labor reserve training system shall in the five-year period provide 4,500,000 young skilled workers.

The practice of training skilled workers on the job in the common trades shall be widely extended by means of individual and group training and course of instruction, so that 7,700,000 new workers are given technical training, and the skilled qualifications of 13,900,000 workers enhanced in the five years.

The earnings in money and kind per work-day unit on the collective farms shall be increased as compared with 1940 by insuring a higher productivity of labor on the collective farms and higher yields of agricultural and livestock produce.

With a view to attracting labor into industry, building, and transport, the system of organized recruiting by means of contracts concluded between business organizations and collective farms or collective farmers shall be resumed.

It shall be considered a primary task to insure adequate numbers of skilled permanent workers for the industrial establishments by further mechanizing production processes and systematically improving the organization of labor and housing conditions and supplies for the workers.

(3) *Culture and health.* The state expenditure on the cultural and social services in town and country—i.e., expenditure on social insurance, government allocations for education, health, and the training of state labor reserves, allowances to mothers of large families and unmarried mothers, allowances to servicemen's families and to those invalided in the Patriotic War, as well as for cultural and social facilities for workers and other employees, not including the state expenditure on

housing and municipal services—shall be raised to 106 billion rubles in 1950, or to 2.6 times the expenditure in 1940.

The contributions by state enterprises and institutions for the social insurance of their employees shall amount in the period 1946-50 to a total of 61,600,000,000 rubles.

By 1950 the number of primary, seven-year, and secondary schools shall be raised to 193,000, and of their pupils to a total of 31,800,000, universal compulsory education being extended to all children from the age of seven both in town and country.

A broad system of schools shall be instituted for the education of that section of the worker and peasant youth who during the Patriotic War and the occupation of a number of Soviet regions were unable to obtain normal schooling.

By 1950 the number of students in higher educational institutions shall be raised to 674,000, and of students of specialized secondary schools to 1,280,000; the number of young specialists graduated from the higher educational institutions shall amount in the five-year period to 602,000, and of graduates from the technical colleges and other specialized secondary schools to 1,326,000.

Wider measures shall be taken to train specialists of higher and medium qualification for the fuel and power industry, the iron and steel industry, agriculture and the railways, as well as primary and secondary school teachers, the training of highly qualified experts in the new fields of technology shall be arranged for and the quality of training of personnel of high and medium qualification improved.

The number of cinema installations shall be increased to 46,700 in 1950, as against 28,000 in 1940; each district center and urban settlement shall have its cinema theater and the number of cinema theaters in the rural districts shall be considerably increased; the number of large regular theaters shall be increased to 898, and of clubs and public libraries in town and country to 284,900.

The number of children accommodated in kindergartens in 1950 shall be increased to 2,260,000, or double the number in 1940. Full provision shall be made for the upbringing in children's homes at the charge of the state of children who lost their parents in the period of the Patriotic War.

In the formerly occupied regions, schools and other educational institutions, scientific institutes, museums, theaters, cinemas, clubs, libraries, and reading-rooms destroyed by the enemy shall be restored.

By 1950 accommodation in hospitals shall be increased to 985,000 beds as compared with 710,000 in 1940, accommodation in permanent crèches to 1,251,000 places as compared with 859,000 in 1940, and the number of medical consultation centers for women and children, children's hospitals, and milk kitchens increased.

The network of rest homes and sanatoria for workers, peasants, and professional workers shall be fully restored and accommodation in sanatoria raised to 250,000 places and in rest homes to 200,000 places.

Medical treatment shall be provided for invalids of the Patriotic War, this to include treatment in hospitals, rest homes, and sanatoria; the manufacture of artificial limbs of high quality for war invalids shall be organized.

The production of medicaments and surgical instruments and appliances shall be increased by 1950 to a total value of 1,200,000,000 rubles, representing an 85 per cent increase over 1940. The mass production of high-grade modern surgical instruments and of the latest tested medicaments shall be organized.

(4) *Housing and municipal development.* The rehabilitation of the wrecked housing in the towns, industrial settlements and villages of the formerly occupied regions shall be completed, and new housing construction undertaken on a scale which will insure a considerable improvement in housing conditions in towns, industrial settlements, and villages.

The proportion of capital investments in housing construction to total capital investment in the national economy of the USSR shall be increased to 14.5 per cent, as against 10.5 per cent in the period of the Third Five-Year Plan. Total investments in capital house construction in 1946-50 is fixed at a total of 42,300,000,000 rubles, as against 15,500,000,000 rubles in the period of the Third Five-Year Plan (not counting individual building). The quality of housing construction must be greatly improved.

The plan of rehabilitation and new construction of state-owned houses for the five-year period is endorsed at 72,400,000 square meters of living space, including 65,000,000 square meters to be built by the ministries and departments and 7,400,000 square meters by the local soviets. In addition, provision shall be made in the five years for the rebuilding and further construction of individual owners themselves and with the aid of government loans, to a total of 12,000,000 square meters of living space.

With a view to improving living conditions, creating permanent cadres of workers in industry, and averting a high labor turnover, business organizations shall undertake the building of one-family and two-family houses provided with garden and vegetable plots for sale on the installment plan to workers, clerks, technicians, and engineers.

It shall be made incumbent upon the ministries and business organizations to take measures to equip the houses and the housing areas under their control in the rehabilitated towns with the principal facilities, such as water supply, sewerage systems, paving, trees and greenery, lighting, public baths, and laundries.

Water supply, drainage, urban transport, municipal power stations, and public baths shall be rehabilitated in the former German-occupied towns. With a view to improving the public services, the existing municipal enterprises shall be expanded and new municipal works undertaken, and in the five-year period water supply systems shall be installed in 16 towns, drainage systems in 13 towns, street car services in 8 towns, and trolley-bus services in 20 towns.

For municipal needs, 1,750 street cars and 3,000 trolley-buses of up-to-date design shall be built in the five years; the number of motor-buses operating in towns shall be increased in this period by 22,000, and taxicabs by 15,000, the paved area of streets and squares in towns and factory settlements shall be extended, the area covered by improved types of paving being increased.

The volume of the reconstruction and building of dwelling houses in rural areas by collective farms and peasants at their own expense and with government loans is fixed for the five-year period at 3,400,000 houses, including 2,240,000 in the former occupied areas.

Peasants and the rural intelligentsia shall be assisted in rebuilding or building materials and ready-made parts.

The repair of housing by local soviets and enterprises is deemed a matter of major importance, and the volume of capital repairs to houses belonging to urban soviets is fixed at the sum of five billion rubles.

(5) *Trade and consumption.* The volume of state and co-operative retail trade in 1950 is fixed at 275 billion rubles (allowing for a lowering of 1945 prices), which exceeds the volume of trade in 1940, reckoned at comparable prices, by 28 per cent.

In the course of 1946 and 1947 the transition from the rationing system to unrestricted Soviet trade shall be completed. The rationing of bread, flour, cereals, and macaroni shall be abolished in the autumn of 1946.

The production and sale to the population of high-grade food products, fabrics, clothing, and footwear shall be extended. The marketable stocks of goods handled by state and co-operative trade, including meat and fish products, sugar and confectionery, cotton, woolen and silk fabrics, and leather footwear, shall be greater in 1950 than in 1940. The manufacture and sale of fancy goods and household articles and utensils shall likewise be increased.

The production and sale of consumer goods shall be increased in 1950 to the following dimensions: aluminum, enameled, porcelain, and chinaware utensils, 260,000,000; samovars, 200,000; tumblers, 160,000,000; furniture (reckoned in fixed prices), 1,200,000,000 rubles; sewing machines, 450,000; clocks and watches, 7,400,000; gramophones, 1,000,000; radio sets, 925,000; motorcycles, 135,000; bicycles, 1,050,000; shotguns, 350,000; cameras, 530,000.

Beginning with 1946 the retail sale of lumber, iron, nails, bricks, window glass, paints and varnishes, and other building and repair materials, shall be organized.

The network of state and co-operative shops in town and country, as well as of wholesale stores and warehouses shall be restored and extended. The network of specialized stores in the towns and of district department stores and stores for the sale of farmers' requisites shall be restored and expanded. The network of tearooms and lunchrooms in towns, district centers, and other large inhabited points shall likewise be restored and enlarged.

The further expansion of collective farm trade shall be promoted, the collective farm markets shall be restored and their number increased, and an extensive sale organized of manufactured goods in demand by the farming population. . . .⁴

The Story of the Great Stalin Five-Year Plan

On March 18, 1946, the Supreme Soviet of the USSR adopted the law on the Five-Year Plan for the Restoration and Development of the National Economy of the USSR for 1946-50.

This law will effect the further strengthening of the Soviet state and indicates the entry of the Soviet people into a new epoch of prosperity.

The Supreme Soviet of the USSR formed the Council of Ministers of the USSR headed by J. V. Stalin. The Soviet government, relying upon the common support of the people and headed by the greatest statesman of our epoch, J. V. Stalin, will lead the tremendous work to increase our mighty socialist power.

The law on the Five-Year Plan for the Restoration and Development of the National Economy of the USSR in 1946-50 is a great program of socialist construction, formulated by Stalin, the inspirer and organizer of the historical victories of the USSR.

The Five-Year Plan, which was worked out by the State Planning Commission of the USSR and presented to the Supreme Soviet, was carefully discussed in the Soviet of the Union and in the Soviet of Nationalities. Thirty-eight Deputies of the Supreme Soviet of the USSR, who represented All-Union Republics, took part in the discussion of the Five-Year Plan, and all of them stated that the new Five-Year Plan completely corresponds to the fundamental interests of the people and that it covers the important tasks of our Soviet state.

The law on the Five-Year Plan is a historical document in which are specified both the main political tasks of the new plan and the con-

⁴ The chapter on plans for the various Republics of the USSR has been omitted.

crete tasks in the fields of growing industry, capital construction, and the rise of the material welfare and culture of the people.

All branches of industry, agriculture, and transport are affected by the Five-Year Plan.

The law has also formulated plans for the restoration and development of the national economy of each of the sixteen Soviet republics.

The law says:

"The Supreme Soviet of the USSR states that the main task of the Five-Year Plan for the Restoration and Development of the National Economy of the USSR for 1946-50 is to rehabilitate the affected districts of the country, restore industry and agriculture to the prewar level and then considerably to surpass this level."

This is the main economic and political task of the new Stalin Five-Year Plan for 1946-50. The law sets not only general tasks, but also concrete ones in the various branches of the national economy and culture.

The tasks are:

In the first place, to restore and develop heavy industry and railway transport, without which we could not move forward.

To create an abundance of the main consumer goods in the country.

To further technical progress in all branches of the national economy.

To further raise the defense power of the USSR and to supply our armed forces with the most modern military technique.

To construct more than 250 billion rubles' worth of restored and new enterprises, and in connection with this, to develop a powerful building industry in all fields.

To restore and build new towns and villages and to increase the number of houses in the country.

To surpass the pre-war level of national income and national consumption.

To strengthen steadily cadres of workers in industry and transport.

To raise the productivity of labor.

To improve national education, train cultural cadres, improve public health and cultural conditions.

To increase the national wealth, state material reserves, and stocks.

To maintain strict economy, strengthen self-support and lower production costs.

Our country knew the great range and high tempo of the previous five-year plans. The new Stalin Five-Year Plan surpasses them all. It is necessary, for instance, to restore, build, and begin production in 45 blast furnaces, more than any previous five-year plan has provided. The Soviet Union will again light one blast furnace after another.

Soviet machine building during the next five years must be doubled. No other country has ever had such a task.

The automobile industry must produce 500 thousand automobiles a year. Within five years we will begin the wide use of automobiles in our country.

Within the next five years we must restore and build 5,900 enterprises. These will be five years of great building!

Compared with the First Five-Year Plan, the gross output of agriculture should increase 225 per cent in 1950. This will mean considerably more bread, meat, sugar, butter, cotton, and wool. Rationing of bread, flour, cereals, and macaroni will be abolished by autumn of the present year. The present method of supplying the population by food ration cards will be replaced by the development of Soviet trade.

The Soviet people will confidently proceed toward an abundance of consumers' products and goods in their country!

In order to realize the great Stalin program, the Soviet people must strain all their forces, mobilize the colossal resources of their country and daringly advance to meet the difficult problems in order to conquer them.

The Soviet people are ready for it!

Under the leadership of the Soviet government, with the great Stalin as its head, the Soviet people will transform the law on the new Five-Year Plan into life.

The Argentine: Planning Towards Autarchy

Introduction

IN A five-year plan for the Argentine, the government proposes a program for industrialization and vast increases in state control. The main objective seems to be a greatly strengthened nation; the goal is to be reached through measures taken to stimulate industry, to increase the population, to break up the vast estates through a progressive and generous lending policy, to absorb the rising population through industrialization and improved living conditions on the farm, and public investment programs.

Industrialization, more than any other program, is the core of the five-year plan of Peron, who supports it for its contribution to the economic, social, and political advance of the nation. The government proposes to achieve the industrialization program by increasing tariffs on industrial products competing with those that might be manufactured at home; by reducing barriers on raw materials and highly manufactured products required to advance domestic manufacturing; by favoring imports of required raw materials through making exchange available at low peso costs; and favoring exports of manufactured goods by exchanging foreign currency obtained through their sale at favorable rates (i.e., many pesos for a dollar); by boosting prices of factory products above the world-wide price; by discouraging the export of raw materials which might be used to produce competing items abroad.

Extension of state control is another cardinal principle of the planners, in part to push the industrialization program, and in part for other reasons. The state is to control the output, allocation, and prices of power, and to control output and prices of raw materials, assuring stability of prices to the consumer. No longer should the government allow the creation of money to be determined by a privately controlled bank: the government in the future would control the monetary machine, making adequate supplies of money available at low rates of interest.

In this process of industrializing and taking over control of a large and strategic segment of the economy the government necessarily has to consider the price problem. At one point Peron admits that the country does not have to sell abroad, but can, in fact, with favorable conditions sell at home. Yet the government is concerned over current high costs, and proposes, as a means of bringing about lower costs and prices, better collaboration between labor and capital, and increased productivity brought about in part by technological improvements. But neither Peron nor his planners make any attempt to reconcile the various price rising policies (e.g., a generous social security program, the high protection and subsidy program oriented to industrialization, the large public investment and capital programs over the next five years) with their general goal of lower prices.

Population and Labor

*Population Problems*¹

Channeling immigration by encouraging as much as possible those elements that are healthy and have some affinity with our culture and the bases of our social structure. . . . (From Plan.)

The problem of colonization cannot be approached without first examining population problems, for these present the basis for the stability of those sections of the population which should settle in the country and exploit the land.

It is necessary to know the facts from census and permanent statistics, the study of which will require taking measures to discover birth and death rates and other facts related to immigration and colonization.

The marriage rate. Necessary measures for promoting the birth rate

¹ *Plan de Gobierno 1947-1951* (Buenos Aires, 1946), pp. 269-72. Translated from the Spanish.

should be taken by increasing the marriage rate through social legislation, such as that of sustaining the indissolubility of matrimony and making valid the religious marriage under civil law in those rural districts that are far removed from offices where civil registers are kept.

In the economic realm promoting of marriage should be achieved by giving subsidies and loans and preference to those people that are united by matrimony for occupying low-cost houses constructed for that purpose by the state.

Promotion of the birth rate. Measures of a permanent character should also be taken for promoting the birth rate socially through national campaigns against birth control and the harm it brings to society and the nation; through protecting the woman during the state of pregnancy and giving her the necessary facilities in her work or profession, together with the most severe repression of abortion.

In the economic realm through increasing and making general the subsidies for newly-born children; through establishing the rule to give preference in employment to heads of families; through fixing the exemption or reduction of taxes and assessments upon large families and extending social services to families with scant means, together with encouraging the construction and ownership of homes.

In the sanitary sphere, by teaching eugenics, by regulating the work of women and their sports, and by assisting the mother and the child before and after delivery; these are some of the many measures that the state should apply in order to encourage the increase of our birth rate.

Mortality. The state should take all necessary measures for diminishing the death rate until it equals that reached in the more advanced nations, through a constant campaign for the application of pre-established measures and education of the people. Such measures should begin by a campaign against infant mortality and a study of the causes which, in cities and each of the regions, produce diseases and the causes which determine in general the degree and the average mortality according to age.

As preventive measures it may be well to point out a solution to the problem of under-consumption from infancy; the rationalization of the diet in accordance with the choice of each individual; the dissemination of literature on hygiene; the intensification of the campaign against all kinds of accidents; medical assistance made general, guaranteeing hygienic housing conditions; and the dissemination of the most elementary facts with regard to preserving health.

As curative measures the fight must be intensified against endemic diseases in the cities and against the diseases characteristic of each region of the country; and the government should extend to all citizens social and medical assistance as a social function of the state.

Immigration and Colonization

Keeping in mind the basic principles on which future legislation on immigration should rely, a bill has been prepared which takes into consideration the pre-established principles on colonization and population, and in addition states that immigration shall be as follows: those selected should be as assimilable as possible into the spiritual and social entity of our people; they should be morally and physically healthy; and be distributed intelligently so as to be economically useful. Immigrants should essentially consist of farmers, fishermen, industrial technicians, and specialized workers.

This plan co-ordinated with the construction of great public works of irrigation, land improvement, and transportation, will facilitate the colonization which the Executive Power proposes to carry out. At the same time an attempt will be made to develop the plan for immigration in accordance with the necessities of our industry and great public works, so that it will be possible to count on technicians and specialized workers whose skills can be put immediately into use, and who will train our own workers.

In view of the special nature of our livestock production and the large tracts of land that are needed for its development, the dividing up of land for colonization should be confined to such land as is suitable for intensive cultivation and the establishing of farms, and it should be linked with plans for irrigating and improving the soil.

Closely allied with these problems is the intelligent distribution of the population and the measures to be taken in order to avoid an exodus from the rural regions.

In the economic sphere, such measures as those which tend to establish the people on the land by improving the living standards of workers on the one hand, and on the other, to procure for the farmer the comforts whose lack cause him to move into urban centres where he expects to find an easier life—such measures could be attained by carrying to the agricultural regions the elementary means for a fitting subsistence by providing comfortable living quarters and for increasing their working efficiency; by founding producers' and consumers' co-operatives; by providing auxiliary rural industries, at the same time offering rural inhabitants easy means of transportation to the nearest urban centers where they may find markets for their products and facilities to buy what they need.

These economic measures should go hand in hand with those of a cultural nature, such as the founding of many more rural schools; instruction in how to adapt oneself to the needs and demands of a region; artisan instruction; wider training in technical skills and technical as-

sistance on the part of the state, without neglecting as a basic duty increased medical assistance.

This plan for decentralizing urban populations and putting them on a new basis economically should be carried out by taking into account the zones where the immigrant population will settle, either in conjunction with Argentine farming families or separately.

*The Colonization of Large Estates*²

Statement of aims. An essential element of a country, the population constitutes one of the fundamental sources of its wealth. To care for and regulate it according to suitable principles is to promote the greatness and prosperity of the nation in every aspect.

To have a policy regarding such an essential element demands taking into account the characteristics of the country, and when we do this we find that our country is in need of immigrants, and that there exist here adequate resources for such an immigration to develop widely and prosperously. Nowadays immigration cannot be determined by such criteria as in the past century, when under very different circumstances, other regulations were undoubtedly very adequate. At that time the primary need was to populate, and while today the basic goal is still the same, it has to be related with other aims characteristic of the exigencies of our time, for our country has changed and progressed so much that its immigration has to adjust itself to new criteria; the old one simply to keep the door open is not enough, especially if we remember that international as well as national factors are involved.

The criterion is thus accepted that to favor immigration is both a national and an international necessity, but both these aspects need to be brought into harmony with the primary aims within the country. To regulate immigration implies, if it is to be done properly and efficiently avoiding unnecessary scattering of energies, simultaneous regulation of all that appertains to colonizing and populating, since these are the three essential aspects that are derived from a two-fold governing aim: to populate and to promote the welfare of the Argentine nation. Consequently, by enunciating these basic principles an endeavour is made to establish those that are essential for carrying out such a great and worthy undertaking.

The principles that are to govern immigration are that it must be spontaneous, selective, and subject to proper channeling. To channel signifies something more flexible and less rigid than to direct or impose; it implies the desire to co-ordinate the national interests and the individual liberty of the immigrant. Within that concept of channeling there is implied the selection that takes place according to various considera-

² *Ibid.*, pp. 274-7.

tions. It is based on the principle of the liberty of the immigrant, and therefore on the principle of equality, but this is complemented by establishing a rule of preference with respect to those currents of immigration which best adapt themselves to the attitudes that prevail in Argentina—for it must not be forgotten that immigration should always tend to unite the (Argentine) homeland, rather than to have as its purpose just to populate or provide workers. The fact that our country is a magnificent melting pot in which all nationalities may be united into one does not exempt us from realizing the unquestionable fact that those are to be preferred as immigrants who by their origin, their customs, and their language are most related to our national qualities and characteristics. This does not imply the existence of any kind of prejudice but simply a desire to relate the general aptitudes that are latent in all with the needs and aims of those who are disposed to receive them.

Perhaps it is the first time that the close connection is pointed out between immigration, colonization, and population. On establishing the basic principles that are to govern these aspects of what is fundamentally just one problem, it has been kept in mind that the concept of the immigrant in our days can no longer be the same as formerly, and that it is therefore necessary to reduce it to a legal concept wherein the economic situation or the means or kind of transportation are somehow subsidiary, since the present conditions in the world make it possible to consider and plan for such immigrants who have some means at their disposal. The intention to remain and to work legally in the country should characterize the immigrant to whom help is extended, according to a noble and humane tradition, from the moment when he steps on our soil.

Complement to immigration is colonization, especially keeping in mind that farmers are preferred as immigrants for they will populate our immense plains. On account of that, preference is extended to them, and as a logical consequence a series of benefits that are not granted to other kinds of immigrants. Large landed property is harmful both to immigration and to colonization and its pernicious influence is combated not only by expropriation but perhaps more efficiently by progressive taxation that may permit a colonization which can be realized by both immigrants and nationals. These are the two aims of the basic principles herein set forth.

Finally, those policies are also set forth that concern population, the problems that accompany its migrations, increase, decrease, and concentration, etc., all of which should be the object of definite regulations which, though independent, must be in harmony with the two aims mentioned above. In short, the one as well as the other deal with different but related aspects of the welfare of the Argentine nation.

These three policies that have been conceived and set forth take account of the highest interests of the nation, in conformity with the cri-

terion of social justice, this being the only criterion which can be really efficiently applied to problems that are so human and that are the product of so many inequalities as are those of immigration and colonization. The present basic policies on matters so vital for us as are immigration, colonization, and population have in view both aggrandizement and the aim to establish a more fitting balance between production, wealth, and the use to be made of them.

Labor.³

The most interesting activity of the government which can be carried out at this time with regard to labor legislation is to systematize, regulate, revise, and improve all the regulations that govern these matters, making them all agree; and (though a code of laws such as that offers certain difficulties when applied to labor) these regulations should embody such doctrines as will tend to stabilize the gains made by labor.

When the work of systematizing and establishing rights is carried out some weak points will have to be straightened out and other truly important problems will have to be tackled.

Maintain production at a level necessary, e.g., to combat the high cost of living.

Order *must* be observed in labor relations, with discipline on both sides; the employee must respect the rights of the employer, and the employer must also respect the rights of the employee.

A great step forward will have been taken in maintaining good relations if the practice of collective bargaining for solving problems of conflicting interests becomes widespread, and if compulsory arbitration and conciliation are imposed.

Basic concepts. The president's idea is so well stated that it needs no further explanation. It is a fact that labor legislation—for the very reason that in the space of less than three years it has received a strong impulse and has considerably advanced—finds itself now in need of readjustments, partly in order to restate such matters as refer to the conditions of labor, for rules now in existence seem incoherent and superimposed. All the legislative experience and practice collected in this period of time should serve to form a code of doctrine wherein all the standard rules governing labor should be classified according to subject, and at the same time be independent of each other. Hereby the advantages of codification will be achieved without incurring the disadvantages, for labor legislation is eminently evolutionary and must change if it is to keep abreast of the times.

On the other hand, the mere task of systematizing is not going to suffice for the fulfilling of its social objective. On the contrary, it is

³ *Ibid.*, pp. 297-300.

necessary that at the same time their revision be undertaken in order to correct possible deficiencies and reinforce weak points.

Among such it might be well to note the legislation regarding indemnities for accidents incurred at work and professional diseases, which all legislators and writers on the subject consider needs modification. For example, there must be compulsory insurance and indemnity, such as pensions for permanent disability or death. This can be carried any time if legislation adopts a system in accordance with the principles laid down by the International Labor Office.

Security of workers in their jobs is another aspect which should be considered and established.

It is also of very great interest to establish a system—even if only on a voluntary basis—whereby workers may be offered access to the capital in industry by introducing the system of labor sharing ownership in industry. In exchange for certain advantages that would accrue to the industries adopting this system these should be obliged to include in the contracts drawn up by collective bargaining a definite policy whereby workers may participate in the higher benefits at the regular rate of interest on the capital invested in industrial or commercial enterprises. When such participation becomes a part of the contract—once the regular interest that corresponds to the capital and that which constitutes the reserve funds imposed by the statutes have been separated from the income—the remaining income shall be distributed in the form of labor shares among all the personnel of the industry (workmen, technicians, and administrative staff); and perhaps even among the capitalists themselves, thereby adding in an adequate manner labor shares to capital shares, and the holders of the labor shares shall have their corresponding part in running the enterprise.

With regard to labor discipline—the words have both economic and social implications. The first relate to the need of maintaining an adequate level of production, which cannot be achieved if the relations between capital and labor are disturbed and reach the extremes of violence. Therefore, labor discipline is said to be not a unilateral concept, but to affect both parts in a possible conflict. Each side must respect the rights of the other; but as it is evident that these might come into conflict, even in justified and lawful conflict, it becomes necessary to arbitrate in order to reach an intermediate solution. This must be done in such a way that during the time while the matter is under discussion the parties involved, and especially the community as a whole, shall not suffer irreparable losses. Conciliation and compulsory arbitration, duly regulated and with the necessary guarantees, are the best means for reaching that goal.

Below is included a proposed law stating the principles for the establishment of a voluntary policy for shareholding workmen.

Shareholding Workers

Statement of aims. The system of wage payments has filled an evident need in economic progress at various stages of historical development as a means of reward for work, and it has come to represent a transitional system between serfdom and other systems that are envisaged for the future and which may vary according to the schools and doctrines. But the contribution of the workers to industrial management and their participation in the benefits is being increasingly emphasized and offers a clear road ahead.

The Executive who today presides over the development of the Argentine nation has stated as his principal aim a policy which is socially advanced and aims at supporting the workers in all their legitimate and justified claims. Among these there is none so important as to facilitate the participation by the workers in the profits of industry, and some steps have already been taken in this direction. But perhaps the most important one is represented by the establishment of shareholding workmen—a system widely advocated by eminent political writers and statesmen, and which offers prospects of promising results for the workers while inflicting only minor loss on the capitalists.

Now as it would not be possible, or at least not convenient, to undertake such a radical change in the system of production in the Argentine while all the other nations maintain a system of salaries, it becomes a duty of elementary prudence to proceed in this matter not in a mandatory manner, imposing the shareholding workmen by means of compulsion, but by persuasion, so that all interested in production may come to understand that the change is a benefit to individual interests and, what is more important, that it will benefit the interests of the community as a whole. Some successful attempts have already been made in this direction by the initiative of the enterprises themselves; but they do not go far in developing the system, so that the authorities have done nothing to further its evolution.

The proposed law that follows is intended to make up for that omission. . . .⁴

Housing and Public Works⁵

Housing

The not merely grave but terrifying housing problem has to be solved on an efficient and just basis. Not only is the number of dwellings in the big cities notoriously insufficient, which accounts for the

⁴ The proposed law is omitted here.

⁵ *Plan de Gobierno*, pp. 315-16, 351-4.

high rents, but also the living conditions are impossible. Crowding and the promiscuity that goes with it are dangerous from a health point of view as well as from a moral one. It is clear that the solution of such a problem should not be entirely in the hands of the State and that other elements should co-operate to increase the number of dwellings. The simple play of supply and demand, attempting to have the former surpass the latter, will solve part of the problem and that is why I venture to say that we must not proceed with a unilateral solution but with a unified effort.

Developing further in the same speech the concept of the words transcribed above, the President said:

Construction of all kinds of houses must be encouraged, which should not be a difficult task because real estate property is considered one of the soundest investments. One of the means to encourage building which has always been successful is the reduction or exemption of taxes for several years for those who build in certain zones and under certain conditions.

A law must be passed to make the owners of industrial, agricultural, forest and livestock property located more than a certain distance from a city, provide houses for all their workers under conditions to be stated in advance. It is clear that this law can apply only to enterprises with adequate financial means.

The co-ordination of the National Housing Administration with the National Loan Bank (Banco Hipotecario) and all the Pension Banks (Cajas de Jubilaciones) which form the National Institute of Social Security (Instituto Nacional de Previsión), so that, as a means of investing their funds, they make loans for the construction of inexpensive housing projects, is another objective to be achieved, together with the granting of loans for real estate purchases to certain groups of workers.

The building of their own homes must be encouraged among the working people, always, of course, within the limits of municipal legislation. This type of family work can be directed by competent authorities, giving to those who plan it free designs and other technical advice which would enable them to make their homes more attractive and sanitary.

Public Works and Transportation

Building of roads, railroads, irrigation systems, river transportation systems, grain elevators, hydroelectric plants, etc. . . . Facing with great courage such great tasks as the building of a national airport, the development of the river Plate, the building of docks for seaplanes and yachts and of an international bridge between our country and Brazil, all these in keeping with the position of our country in the world.

Public works and transportation must be essential elements in the government plan, not only on account of the wealth which they promote in the country, both directly and indirectly, but also because they are a source of work, of occupation during difficult periods, and of absorption of labor. It is obvious that a plan of public works and transportation requires large capital investments, but the government has considered it indispensable to face all these expenses in order to bring the five-year plan to a successful completion.

In regard to public works and transportation, the government plan of action for the five years 1947-51 is designed to give the country all the basic elements to expand to the limit the network of roads, railroads, and river transportation.

In regard to sanitation, it will try to provide the country with enough drinking water and works of sanitation to preserve the health of its citizens. Up to 120 million pesos a year will be allotted to achieve this objective.

In regard to shipping and to ports dredging and placing of buoys will be intensified. A new floating dock will be acquired and on those rivers on which important commercial ports are located work will be effected so as to make them navigable beyond a certain distance. For this purpose up to a total of 200 million pesos will be spent during the five years.

Ten new projects are to be completed in the ports and the 31 already begun completed, for which purpose new equipment is to be purchased to bring the services up to date. Also the state is to regain ownership of those in private ownership. The investment required will amount to 230 million pesos for the five years.

With the aim of sanitation and zoning of important regions near the federal capitol, works of improvement of the Riachuelo [River] are planned. They will provide a tunnel under the river, a new port of junction and a ten-kilometer industrial canal. The cost planned for this work will be up to 100 million pesos.

In the north zone the development of the river valley will continue. A total of 8 million cubic meters of land will be refilled and 120 hectares of the reclaimed land will be used for parks and gardens. This zone will be given a modern airport, and to reach them, four large bridges will be built. The total investment for these works will amount to 70 million pesos.

Accompanying this increasing state activity and the economic and social purpose of its policy it has been planned to construct up to 296 buildings for ministries and other agencies, Postal Telegraph Offices, Police, etc. . . . spending on these 195 million pesos during the five-year period.

School buildings will require 335 million pesos. A total of 1,105 buildings have been planned containing 7,900 classrooms with a capacity for 300,000 pupils at all the different school levels—elementary, secondary, technical, and university.

With the purpose of increasing the tourist trade, especially in its social aspect, ten big hotels are planned with a capacity of 2,000 guests each, also six summer and rest camps for 15,000 people. The amount spent on these buildings over the five-year period will be 70 million pesos.

Finally, in accordance with the economic policy of the present government and with the purpose of intensifying and regulating the production and distribution of grain, eight large terminal grain elevators are going to be built with storage room for 600,000 tons. Another 40 with 360,000 tons capacity will be distributed strategically in different parts of the country. Up to 50 million pesos will be spent on this project.

The country highways will have to be adapted to the new needs. First, 3,400 kilometers have to be built (at a cost of 116 million pesos), laid out, and paved, and another 2,630 kilometers already built will be paved. For the carrying out of the sea-works it is necessary to reconstruct 220 bridges with a span of 30 to 400 meters and 15 others of more than 400 meters span. The total investment on these road works will be around 555 million pesos.

In regard to transportation, the work will consist only in providing the state railroads network new lines, finishing those already under construction, improving the railroad system, acquiring new equipment and modernizing that already existing, installing special water services, and giving the employees comfortable and adequate housing. Eight hundred million pesos will be spent on this project during the 1947-51 period.

Having improved river transportation as stated above, the State River Fleet will acquire 88 new ships and tugboats with a total of 77,000 tons, and 106 lighters and barges with a total of 60,000 tons. The cost of these acquisitions will be 100 million pesos.

To preserve the flora and fauna typical of our country, to help the people to know and enjoy its natural beauties, and to give rest and relaxation to the lower-income groups, we are planning to preserve and protect the forests and lands that form the national parks, to establish new ones, and to provide spacious, comfortable, and inexpensive hotels at strategic points. At the same time the national and international tourist trade will be furthered by adequate hotel legislation. Toward the fulfillment of this whole program a total of 65 million pesos will be spent.

The building of the National Airport at Ezeiza, near the federal capitol, will be continued at an accelerated rhythm so as to give it the extension indispensable for the present and future intensification of na-

tional and international air services. The cost of this important work will amount to 120 million pesos over the five-year period.

Industrialization

To obtain not only that which is necessary to cover all the present-day needs, but also to insure the fulfillment of any future needs without altering the normal development of our country's life, by means of building up reserves in the different branches of our economy.⁶

Production of Raw Materials and Industrialization

There are two aspects of the production process: production of raw materials and industrialization.

There are two large groups within the production of raw materials: foodstuffs and raw materials proper. As to foodstuffs, the state must act as the only buyer, custodian, and distributor of all grains and oils, not only to insure the basic nourishment of the population, but also to stabilize prices and avoid a rise in the cost of living. For the same purpose it must supervise the production and supply at stable prices of the other basic foodstuffs which cannot be stored over long periods of time.

In regard to raw materials proper, the state must act differently according to their origin and characteristics. Thus, in regard to forests, its main duty is to protect them and regulate their exploitation. This is the purpose of the attached bill. In mining it is necessary to organize and encourage exploitation with a strong state control which will leave entirely in the hands of the state the mining and distribution of the mineral ores which are essential or radioactive.

To the state also belongs, besides the special functions already stated, the promotion and orientation of the raw material production so that it will be sufficient and economical, with stable prices, just distribution, and cautious storage, always giving priority to the national industries.

The second aspect of production already mentioned is industrialization, the great importance of which in the nation's life, production of wealth, and work makes it necessary to protect and encourage it in accordance with the rules stated in the corresponding diagram⁷ which is based on the following ideas:

Industrialization Policy

Industries to be protected or promoted. In the first place, those industries already established which use domestic raw materials derived

⁶ *Ibid.*, pp. 357-66.

⁷ Omitted here.

either from agriculture and cattle or from mining and forestry production must be *consolidated* to satisfy the consumers' needs.

This protection must be practiced against the "dumping" in any of the forms stated in Decree no. 14,630 of June 5, 1944 (Art. 140) or *when competing foreign industries may endanger any production whose continuity and development may be desirable for the economy of our country*. In general it is advisable to maintain the competition for quality which will be an inducement in the perfecting of our national industry.

Protection in its different forms will also permit the permanency and stability of those industries which use raw materials imported partly or totally from abroad and which produce essential articles either for individual consumption or for national defense (rubber and all metals in general).

It can be stated that, once the market will have returned to its normal conditions of prices and commercial intercourse, of all the industries not included in the above paragraphs, which will lack protection, only those will continue which will find in our country such favorable conditions as to raw materials, markets, prices, and technical skill which will allow them to compete with foreign production.

On the other hand, it will be useful to *promote*, that is to start new industries or to enlarge those already existing, which use domestic raw materials for domestic consumption or for export. It will also be advisable to promote the production of articles which are essential or necessary for consumption or for the defense of our country, and which demand partially or totally imported raw materials.

Reasons which justify industrialization. We can mention as general reasons which demand or justify the protection or promotion of industry:

(a) Political

To increase and affirm our economic independence and national policy

To aid our nation's material and moral greatness

To obtain by means of decentralization our economic equilibrium, and therefore our political balance.

To resist successfully any external pressure

To insure our national defense

(b) Social

To avoid post-war unemployment

To increase the number of jobs, to employ our increasing domestic population and also any possible immigrants

To raise the standard of living by raising wages in industry

(c) Economic

To increase the national income and also the possibilities of its better distribution

To absorb the unexportable excess of our agricultural and cattle production

To promote a national stabilization of prices independent from the variations of the international markets

To increase national capital formation

(d) Financial

To render our money independent and stable

To promote a productive investment of our national savings

To increase the sources of government revenue, making them even freer from the fluctuations of foreign trade

General Objectives

The following paragraphs describe in detail the logical, though cautious, industrial development which can be reached in our country by 1951, the last year of the five-year plan established by the government.

In the estimated increase of production the improvement of the standard of living, the replacement of some of the articles which are imported but which can easily be manufactured here, and a moderate increase in the degree of industrialization of raw materials for exportation have been taken into consideration. For the amount of domestic consumption in 1951, the normal increase of population has been taken into account; but this figure should be increased by the as yet unknown number of immigrants who will come to our country during this five-year period.

The following tables show the production to be reached by the different industries during the government plan 1947-51, and figures corresponding to the principal elements of the total industry of the nation.

The figures refer to the aggregate value of the articles manufactured by industry which represent the income of national industry. The values assigned to the year 1951 have been estimated in pesos with the same purchasing power that they had in 1943 (the last year for which we have detailed data). That means that any differences with 1943 represent an increase in physical volume of production, that is, the amount of articles produced. It is clear that the values of production to be reached in 1951 will be influenced by the process of devaluation of the currency, but since the interesting factor which shows the amount of labor and the well-being of the population is the physical volume of production and consumption, the given figures are valid.

The aggregate value for 1951 has been figured according to the procedure explained above. In the figure for the number of employed people a 7 per cent increase in efficiency has been estimated, on account of technical progress and increasing mechanization. Total money sala-

ries and wages have been increased by 15 per cent over those of 1943, taking into account the higher standards of living which the working classes will have, thanks to this plan. It must be noticed that this 15 per cent increase is in pesos of the same purchasing power as those of 1943, that is in *real wages*. Finally the installed power capacity corresponding to industrial production has been increased by 5 per cent over that of 1943.

Thus we have outlined the general industrial goal to be reached in the next five years. It will be achieved, thanks to general measures which influence the different factors making up the industrial process, and also to special measures concerning each one of the specific industries as explained in detail in following chapters.

APPROXIMATE PRODUCTION TO BE REACHED BY EACH SPECIFIC
INDUSTRY DURING THE FIVE-YEAR PLAN

<i>Industries</i>	<i>Present Production</i>	<i>Production to be reached</i>
		<i>Tons</i>
Cotton	63,000	80,000
Wool	21,500	30,000
Rayon	4,500	8,000
Textiles made of domestic long fibres	4,000	6,000
Silk	2	300
Ordinary Paper	100,000	190,000
Newsprint	.....	50,000
Washing of wool	50,000	100,000
Caustic soda	10,000	40,000
Sodium carbonate	.....	25,000
Lead arsenate	.....	500
Barium chloride	500	800
Citric acid	150	400
Minium	650	1,000
Litharge	500	800
Zinc oxide	1,400	3,500
Steel ingots	120,000	315,000
Lead	22,000	24,000
Zinc	2,000	6,000
Tin (including tin for tin plate)	850	2,600
Antimony	1,100	2,000
Aluminum	1,200	1,400
Tin plate	.....	70,000

INDUSTRIAL DEVELOPMENT BETWEEN 1943-51

	<i>Unit</i>	<i>1943</i>	<i>1951</i>	<i>Per cent increase</i>
Aggregate value of output	million pesos.	3,208	4,596	43.3%
Salaries and wages	" "	1,673	2,560	52.8%
No. of employees	thousands	1,093	1,460	34.0%
Power capacity	million H.P.	3,933	5,890	50%

General Development Measures

Defense tariffs. These include the establishment of additional duties, import permits, and import quotas. All these measures have been considered in the system of development and industry protection established by Decree no. 14,630/44 which will be enforced as the Executive considers it necessary.

The customs duties may serve the development of industry or its defense. The first kind are established in cases of infant industries which cannot yet compete with similar ones already in full production, and whose production costs therefore are lower. These duties are temporary and last only until the domestic industry reaches its full development and can compete in the international market. The defensive duties for the protection of industry are higher than the development ones and are used in cases when our domestic industries have to face the unfair competition of foreign dumping. Their rates and duration depend on this competition.

In cases when the local industries supply only a part of the country's demand, the rest being supplied by foreign products, duties are not desirable because they would raise prices, and import quotas are established to supplement the country's need.

In cases when it is only necessary to control the imports so as to avoid any possible monopoly which would harm the national industries, import permits are required by means of which the entry of products into the market can be regulated.

Exemption from or reduction of customs duties. As a complement to the measures which encourage development by means of higher duties, permits, or quotas for manufactured products, the state will provide laws which will exempt from duty those products which are not, or only insufficiently, produced in our country, but which are indispensable for the production of essential articles or for the defense of the country. Likewise machinery, vehicles, motors, spare parts, and other objects not yet manufactured in our country will be made duty-free.

These measures will reduce the cost of raw materials and machinery used in the production process, as well as the cost of transportation of the manufactured articles; and therefore the place our national industry in a better position to compete with other nations, since we shall be able to offer cheaper articles.

Subsidies. The granting of subsidies is also contemplated in the above-mentioned plan for development and protection of industry (Decree no. 14,630/44), its use being limited to special cases when the increase of customs duties is not advisable.

In cases of articles produced by domestic industries in quantities too small to satisfy the demand, a combination of higher customs du-

ties and subsidies can be instituted. Since in this case most of the articles are imported, a small increase in the customs duties which will not affect prices much will, nevertheless, provide enough money to finance the subsidy for the local industry and give it the means to establish itself and to expand. The advantage of this system lies in the fact that the funds for the subsidies come from the imports themselves.

Exchange control. The rates of exchange for imports will be graded so as to give preference to raw materials and half-finished products not produced in this country or produced only in insufficient quantities. The same will be applied to machinery and spare parts, and to vehicles and motors not manufactured in this country. In regard to exports, favorable exchange will be granted to highly finished national products. This preference in the exchange will decrease in the measure as the products become less and less finished. At any time the policy carried out in regard to exchange must be in perfect harmony with the customs policy.

Tax reduction. Last June 1st. the national government issued Decree no. 15,921/46, by which it was possible to lower the taxes established by the Income Tax Law, when the money saved was used for increasing the productive capacity of factories. The proportion of this decrease is determined by the said decree. It does not apply to real estate. This measure must be supplemented by the inclusion of buildings which are necessary for the expansion of production plants. Both measures together will have the immediate effect of inducing factory owners to increase the output capacity of their establishments whenever the national market allows it or whenever export is possible.

Financing and credit. The new banking structure, the establishment of a banking system under the supervision of the Central Bank and the conversion of mortgage loans (*titulos hipotecarios*) and internal debt, have been three measures directed to decrease the interest rate and give complete guarantee to the depositors. They have thus created a long, medium, or short term market for financing the productive development of the country and especially of industry. The Bank of Industrial Credit, a state institution specializing in credit to industries, will fulfill its mission of granting credits at convenient terms to large as well as small industries, intervening when advisable in their respective financing.

New ad valorem tariff. Argentine industry and commerce urgently demand the sanction of a new ad valorem tariff, which will take into consideration the new aspects of international commerce and the technical progress achieved in the production process; it must make possible at the same time, by means of a suitable system of duties, the encouragement of our national production, especially industrial production.

The drafting of the new tariff has two parts (1) drawing up a new classification and (2) fixing new valuations and duties.

The first part was started in 1941 and finished at the end of last

year, being approved by Decree no. 2,715/46. The second part remains to be done and the government will accomplish it as soon as possible. A special technical organization will be created to make the necessary technical and economical studies and once the new system has been created, it will have the permanent task of keeping it up to date. Once more we insist on the great importance of direct co-ordination between our tariff policy and our exchange policy.

Therefore the General Customs Office will be limited to its specific function of collecting the duties, the technical and economical work being in the hands of the new organization as described above.

Industrial Technology

Machinery. And sound industry must have adequate modern equipment in accordance with its state of progress and that of other branches. The state must watch this aspect of our national industrialization, especially the introduction of second-hand implements bought from another country which has acquired new equipment. If no measures were taken in this direction, Argentine industry might suffer by not being able to compete in price with other industries in the short run and this, in the long run, would create bankruptcy in her industrial establishments unless her prices were raised.

The production of certain types of machinery will be encouraged and also the importation of others.

Technological process. Very little has been done in this respect in our country. It is indispensable to develop greatly the organization of the National Institute of Technology (Instituto Nacional de Tecnología) in which are studied systematically the special characteristics of our raw materials and the best way of processing them so as to obtain the best results. This part of the government program will satisfy a widespread need in the Argentine industrial system and further be supplemented by constant missions abroad of Argentine technicians to finish their training and by encouraging foreign specialists to work in our industrial centers and to train a staff of Argentine technicians.

Improvement of National Statistics and Economic Research ⁸

Thanks to the new organization of national statistics, the government is trying to achieve a major adjustment and a faster publication of their series and indexes.

In the industrial field the annual industrial statistics will be brought up to date and a new series of systematic economic studies will be

⁸ *Plan de Gobierno*, pp. 366-7.

started, providing a valuable index of present-day information, not only for the government authorities but also for industry planning further development.

The industrial census must be improved so as to follow closely the industrial development which has so much influence on the general economy.

Industrial Legislation ⁹

Since industrial legislation is the vehicle through which industrial policy materializes, it is very important for the government to complete the frame of our industrial legislation with adequate rules. We have already mentioned a law of tax exemptions on raw materials not produced in this country or produced only in insufficient quantities, on machinery, transportation, motors, spare parts, and other equipment not manufactured here.

A law must equally be promulgated to establish general draw back benefits for the Argentine industrial output, a legal instrument lacking in our industrial legislation.

At the same time, the proper organs must carry on the compilation of national and provincial legislation and municipal ordinances concerning the establishment and encouragement of industry with a view to uniformity and rationalization.

⁹ *Ibid*, p. 367.

Part Three

PROGRESS

Plans and Recent Economic History

The 1947 Crisis

POLITICAL uncertainties and economic crises in 1947 restrained advances on the economic front, and planners were disappointed.

In virtually all aspects of economic life, results were not generally as favorable as had been planned. Short of raw materials and other forms of capital, some countries suffered from serious unemployment (e.g., Germany and Italy); and operating under inflationary conditions and in economies seriously short of supplies, many others (e.g., France, Japan, Greece) experienced disguised unemployment. By performing relatively unproductive tasks, workers could earn enough to obtain rations with a relatively abbreviated working week; hence why work a full week? ¹

A rise in productivity is one of the cornerstones of every plan; for rising standards of living and shorter hours depend on an increase in man-hour output. In the first year or two after the war, man-hour output began to rise as minimum supplies of working capital became available and producers began to profit from the economies of large-scale output. But by the middle of 1947, annoying bottlenecks began to plague producers; and the rise of man-hour output began to level off, or in some countries even to decline in response to shortages and to failures to ex-

¹ See, for example, Committee of European Economic Cooperation: *General Report*, (Paris, September, 1947), Vol. 1, pp. 11, 26-31.

pand output substantially. As the Economic Commission for Europe, in discussing the situation in 1947, puts it: "With industrial production at some 10-15 per cent below the 1938 level and an unchanged industrial working population more completely utilized, the productivity per man-hour is definitely below pre-war in Europe as a whole."²

Perhaps the outstanding characteristic of the planned economies of the early post-war period was the shortage of resources for investment. Many of the plans were over-ambitious in their investment programs, some calling for allocations of 20-30 per cent of the national income of the countries involved. Planners failed to take account of the great strain that the extended investment plans would put upon their price structure and upon their balance of payments. Operating under economies short of consumer goods, they failed to allow adequately for the effect on prices of investment programs, with the rise of spending power relative to the supplies of consumption goods made available. Income earned in the production of investment goods was not offset by a corresponding flow of consumers' goods.

Particularly in their failure to take into account the universality of large investment plans were the planners remiss. France might conceivably obtain the help from abroad which might assure the success of the Monnet Plan. But with almost every country in the world seeking foreign aid, and primarily from the United States, the "mendicants," as Harrod calls them, were bound to be disappointed. They would have found much less help abroad than planned even if the dollar crisis had not blossomed out into a major world crisis. We shall return to the international problem later.

That the favoring of investment is perhaps the central theme of every plan, is by now clear to the readers of this volume. But a penchant for large investment programs is not restricted to the sixteen countries under consideration here. The report of the sixteen *European* countries issued by the Paris Conference in September, 1947 is in no small part an essay on the need of large investment programs for Western Europe. In Chapter III of their report, the Paris experts elaborated their grandiose program for investments during a four-year period. United States experts in turn scrutinized these estimates and pruned them substantially. This country was not prepared to finance these large investment programs at the expense of the American taxpayer, though it is not at all clear that by keeping investments down and costs up for Europe, the application of Gladstonian principles of finance by the United States might not in the long run increase the costs to the Ameri-

² The Economic Commission for Europe: *A Survey of the Economic Situation and Prospects of Europe*, (March, 1948, Amer. Edition), p. 27. Also see pp. 26, 28-9.

can taxpayer. Even the ambitious British investment program of 1947, which became the target of many distinguished British economists, only recouped one-fifteenth of the deficit in investments over the preceding seven years.³

This common "overemphasis" on investment, characteristic of virtually every country in the world, tended to keep consumption down, to raise prices, and, through the direct impact on imports and the higher prices of exports, to aggravate the balance of payment problems. In Europe, industrial production for fifteen countries rose from 68 per cent of pre-war in the first quarter of 1946 to 86 in the third quarter of 1947; but output in major investment goods industries of eleven countries rose from 60 to 84 per cent of pre-war, a much larger percentage rise than for *all* industrial output, and *a fortiori* in relation to *non-industrial* output. In the first three quarters of 1947, output in non-investment goods declined slightly; but that of investment goods rose by 6 per cent.

The argument is not that a strong case cannot be made for large investment programs, for Europe's recovery depends upon a rise in efficiency which in turn requires substantial investment. What is perplexing is how to achieve these programs without unstabilizing the economy, for the usual sources of savings are not likely to equal more than about one-half of the projected investment programs. For the remainder, they must either rely on budgetary surpluses and foreign aid or suffer inflation. For 1952-53, ten countries which account for about 85 per cent of the aid under the ERP propose investments equal to 19 per cent of their gross national product. (GNP). By keeping investments at around 20 per cent of GNP, they seek to raise their output to 20 per cent above that of 1938 and 35 per cent above that of 1947.⁴

Investment programs are planned to replace and modernize plants, improve transportation and power resources, and increase the productivity of land. In backward areas, a primary objective is industrialization. The importance which these countries ascribe to industrialization is evident from the discussion in Chapter VI and from the plans of India, Greece, Poland, Czechoslovakia, Hungary, the USSR, and the Argentine—all presented in this volume.

³ See *Committee of European Economic Cooperation*, Ch. III; Senate Foreign Relations Committee *Hearings on European Recovery Program*, Part 3, pp. 1006-1007; Dept. of State: *Outline of European Recovery Program*, (1948), pp. 35-6, 87-91, and my *European Recovery Program*, (Harvard University Press, 1948), introductory chapter and chapter I.

⁴ OEEC: *Interim Report of the European Recovery Program*, I, December, 1948, pp. 93, 96-8; U.N.: *A Survey of the Economic Situation and Prospects of Europe*, pp. 1-7.

These are, however, only examples; for the industrialization movement is almost universal in backward areas. In an interesting volume recently published, the Department of Economic Affairs of the United Nations analyzes the planning of Latin American countries, India, the Middle East, Poland, Yugoslavia, and various parts of Africa.⁵ Plans discussed in that volume reveal a tendency to support investment and industrialization programs which are not likely to be realized in view of current capital shortages. In the countries there considered, demand for industrialization in general prevails with varying degrees of enthusiasm for nationalization. In Latin America the comprehensive plan, like that of the Argentine, is the exception, for planning is generally more restricted in scope. Increased emphasis on investment and nationalization is the usual pattern, however. Similar generalizations apply to the Middle East and Africa.

In Chile, for example, the National Economic Council has broad powers to influence investment, encourage industrialization, control credit and the distribution of goods, and manipulate costs and prices; but a general plan for the allocation of economic resources seems lacking.⁶ Countries in Eastern Europe, as suggested by our study of Poland, Czechoslovakia, and Hungary, embark on comprehensive programs. In Yugoslavia, the Five-Year Plan reflects the influence of the USSR. Admittedly ambitious, the planners in Yugoslavia call for investment equal to 27 per cent of income by 1951; for a reduction in consumption; for a further extension of nationalization, though industry is on its way to being 90 per cent nationalized; for a rise, by 1951, of national income 80 per cent above that of 1939; and for capital expenditure $2\frac{1}{2}$ times above pre-war. Industrialization especially is to profit from the heavy investment program: the increase in industrial output over 1939 is to be fivefold; and this output is to increase from 20 to 50 per cent of the total product. Like the USSR Five-Year Plan, the Yugoslav Plan is conspicuously silent on foreign trade or foreign sources of capital. Again, here is a program which is clearly not going to be fulfilled, for investments are far out of line with realities.⁷

Continued inflationary pressures in 1947 and 1948 were another obstacle to the fulfillment of the plans discussed earlier in this book. The ambitious programs, which generally require investments in excess of the savings available, and therefore have to be implemented through the activation of idle balances or an expansion in monetary supplies,

⁵ U.N.: *Economic Development in Selected Countries: Plans, Programmes, and Countries*, (New York, October, 1947).

⁶ *Ibid.*, pp. 93-106.

⁷ *Ibid.*, pp. 209-15.

contributed greatly to the advance of inflation. In France, for example, the budgetary deficit and the investment program of 1946 would have required savings of 33 per cent of consumption to exclude inflation. Actually savings were much less.⁸

Government deficits, created in part by military expansion, strengthened the inflationary forces; but the public deficit does not merely add to the inflation resulting from the excess of investment over savings; in large part the public deficits stemmed from investment programs. A vigorous tax and savings program might have made the large investment programs compatible with relative stability of prices. Unfortunately, in highly inflationary economies, and in countries with archaic tax systems, it was not possible to introduce such programs. The large amount of purchasing power relative to supplies available at controlled prices, after years of deficit financing and controlled prices and distribution, further increased the difficulties of containing inflation.

In general, prices continued to rise in 1947 and early 1948. An increase in wholesale prices from 1945 to 1947 of 40 per cent in this country was bound to have adverse effects upon others; for the United States has provided one-third of the world's exports in the last few years. In Latin American countries and in most European countries, prices continued to soar in 1946 and 1947. In a few of the smaller countries and in British countries, inflation seemed under control; but a large rise in British wholesale prices in 1947, which might have been more serious in the absence of controls, suggested dangers even for the British economy. In France, wholesale prices were up about $3\frac{1}{2}$ times from 1945 to January, 1948; and then were relatively stable for several months. By September, 1947, prices in Italy were 62 times those of 1938 and from then until the end of the year, they declined by 11 per cent. The rise in Japan was close to 5 times from 1946 to early 1948, and in Hungary the cost of living had increased to 24×10^{28} the pre-war price level by April, 1946; and a monetary purge was followed by renewed increases. In 1948, the rise in the cost of living in Western Europe at any rate slowed down: France was a striking exception.⁹

Under these circumstances, it is not surprising that governments had difficulties in obtaining adequate funds for investment and, therefore, in fulfilling their commitments under the various plans. For many countries, despite the increased responsibilities, public expenditures in pre-war currency units were below pre-war. Moreover, under inflation in controlled economies, it seemed impossible to retain adequate reserves

⁸ U.N.: *Survey of Current Inflationary and Deflationary Tendencies* (New York, Sept. 1947), p. 42.

⁹ Figures from Federal Reserve Bulletin (May, 1948), p. 608; and UN: *Monthly Bulletin of Statistics*, December, 1948, pp. 149-58.

of raw materials, with the result that the working capital required for large investment programs was not available.¹⁰

Under the impact of the crisis of 1947, many of the European countries seeking American aid made strong efforts to keep inflation under control. Among the measures taken were reductions in investment programs, compulsory investments of deposits in government securities, tax reforms and increased tax rates, and economies in public expenditures. Deficits continued to prevail for most countries, however, although the planned excess of public outlays was generally less for 1948 than for the preceding year.¹¹

Related both to the investment programs and to inflation is the chronic shortage of the dollar, which became the symptom of deteriorated conditions everywhere. Europe alone had an adverse balance of payments of \$7.5 billion in 1947. Whereas in 1938 Europe had an excess of imports over exports of \$2 billion financed out of dollar earnings on investment, shipping, and the like, in 1947 the excess was several times as large, and means of financing were no longer available. The main task of the European Recovery Program is to narrow this deficit. As the major cause of the deficit is the rise of prices of imports (and secondarily the reduction of earnings on invisible account), control of inflation in the United States will help greatly by keeping down prices of European imports. Western European output, however, must be raised by about 25 per cent in the next four years and reallocated with a view to reducing investments and increasing exports relative to imports. Programs to convert to oil, to expand hydroelectric facilities, to modernize transportation, to expand iron and steel capacity will all require reconsideration. What the planned economies hoped to accomplish in five years may well take from seven to twelve years. Undoubtedly planners were frequently unrealistic in proposing vast investment programs. Their critics may, however, be going too far in the other direction.

Progress in 1948 was satisfactory. Industrial output of Western Europe was about 10 per cent higher in the second quarter of 1948 than in the corresponding period in 1947.

Readjustment of exchange rates and control of inflation will help equilibrate the balance of payments; but even more important will be the expansion of output, the reallocation of resources, and—as a prerequisite to keeping Europe from becoming a permanent pensioner of the United States—the resumption of multilateral trading and the improved economic status of non-European countries. In 1947, these countries had

¹⁰ *A Survey of the Economic Situation and Prospects of Europe*, pp. 80-83; and UN: *Survey of Current Inflationary Tendencies*, p. 27.

¹¹ These measures are well summarized in the Senate Committee on Foreign Relations Hearings on the *European Recovery Program*, (1948), pp. 423-27.

an unfavorable balance of payments with the United States of \$4.5 billion. Europe cannot depend upon an export surplus with these countries to pay her bills so long as currencies are inconvertible; and she will not be able to force the overseas countries to pay her debts to the United States so long as they remain heavy debtors to the United States.¹²

Progress in Individual Countries : the USSR

In view of what was said in the preceding section, advances are not generally expected to be commensurate with targets. The gains in recent years are not, however, uniform by any means.

In the USSR, substantial progress seems to have been made in the first three years of her Fourth Five-Year Plan. Undoubtedly the unavailability of United States capital slowed up her progress; but dollar scarcity was not likely to be serious for a country relying relatively little on foreign trade and capital. Besides, in the early post-war period the USSR was able to obtain substantial help from Lend-Lease, reparations payments, and UNRRA.¹³

In the Fourth Five-Year Plan (1946-1950), the Soviets proposed to increase total output by 38 per cent beyond the 1940 level and by 48 per cent above the latest available pre-war year. Deterioration caused by the war is reflected in a target for 1950 of only 114 per cent of the 1942 target, reflecting a modest advance compared with that of earlier plans. According to the plan, output of iron and steel was to rise but one-third and consumption goods about one-fifth, while that of coal and electricity was to increase much greater than the average. Much emphasis was put upon large capital investments yielding commensurate consumption goods in the distant future. The 1950 target for three important classes of machinery and engineering is 236, 218, and 167 (1940 production = 100).

Accomplishments in 1946 and 1947, taken together seem to have been satisfactory. Apparently the delay in 1946 caused by drought and difficulties of reconversion was largely overcome by 1947; and by that year, gross industrial output was 3.5 per cent above the target, although several important industries (e.g. coal, timber, pulp, and paper) were producing from 2 to 6 per cent below the targets set for 1947, the second

¹² The reader should consult especially *Committee of European Economic Co-operation*, I, pp. 4-62; *A Survey of the Economic Situation and Prospects of Europe*, parts 2, 3, and 4, ch. 2; and *Outline of European Recovery Program*, pp. 25-35 and section IV; and my *European Recovery Program*.

¹³ Cf. the discussion in *Final Report on Foreign Aid* of the House Select Committee on Foreign Aid, (1948), pp. 483-501.

year of the Plan.¹⁴ By 1948, output in the USSR was apparently 114 per cent (1940 = 100) (58 in 1945, 92 in 1947). *The Economist* concludes that the USSR had reached their overall targets for 1948 but were operating with a surprisingly small increase in basic materials; and the gains in the East had been much larger than in occupied areas.¹⁵

The United Kingdom

The battle for output of 1947 proved to be a losing one for the British primarily because of a deterioration in their international position. Britain's target of exports—140 per cent of the 1938 volume for 1947—was far from reached, and the ultimate goal of 175 per cent of the 1938 export volume is not yet in sight. Her large losses of invisible earnings (arising especially from her liquidation of foreign investments), the increased price of imports, and heavy expenditures abroad account for the intractable deficit in her balance of payments.

In its post-mortem, the British government explained the failure to fulfil the objectives stressed in the *Economic Survey of 1947* by its unwillingness to yield on freedom, and by the rise of prices of imports, a factor beyond its control. Imports were to be £1,450 million; but because of a price rise of 9 per cent, the British had to pay £1,574 million for their imports. *The British adverse balance was £675 million in 1947, or 93 per cent greater than anticipated.* An excess of expenditure on imports (124), excess of government expenditures abroad (36), a deficiency in receipts from exports and re-exports (75), a deficiency in net invisible income (90) (or a total of £325 million) explain the *unexpected* rise in the deficit.¹⁶

The crisis in the balance of payments stimulated corrective measures. The outburst against the planned economy, and particularly against the poorly planned economy, was continued loud and long. Critics blamed the excessive investments which tended both to increase inflationary pressures and to raise imports and reduce exports. Yielding to this pressure, the government in the latter part of 1947 cut back a small part of its investment program, imposed additional checks on spending, inclusive of pressure to keep wages down, reduced rations, raised taxes, and restricted imports.¹⁷

¹⁴ See especially *A Survey of the Economic Situation and Prospects of Europe*, pp. 154-63. A less optimistic appraisal will be found in *Final Report on Foreign Aid*, pp. 428-42.

¹⁵ *The Economist* (London), December 11, 1948.

¹⁶ UK: *Economic Survey for 1948* (1948), pp. 56-7.

¹⁷ Cf. Roy Harrod: *Are These Hardships Necessary?*, (1947), especially ch. II; and also UK: *Capital Investment in 1948*, Cmd. 7268, (December, 1947), p. 5; and *Statement on Personal Incomes, Costs and Prices*, Cmd. 7321, (February, 1948).

It should not be concluded from this narrative that economic conditions continued to deteriorate. Actually the gross national product rose by £720 million in 1947, or 8 per cent, and the total resources available for use at home £1015 million, or 11 per cent. Personal consumption in 1947 was estimated at 102 per cent of 1938 as compared with 98 in 1946. In general, then, real output and consumption seemed to rise in 1947, though in view of the unavailability of essential consumers goods, it would be wrong to assume that the standard of living was higher than in 1938.¹⁸

Undoubtedly the British experienced an unfortunate crisis in 1947 which should not be blamed on the government alone. Continued loss of competitive power, the growing threat of bilateralism which deprived the British of dollars otherwise obtainable for exports, the crop failure of 1947, the political confusion abroad—these and other factors were either acts of God, or largely of men not subject to the control of the Labour government. We should not, however, completely exculpate the government.

By 1948, there was much improvement. This is evident in an anticipated reduction of the gold and dollar deficit from \$4,127 million in 1947 to an anticipated one of \$1,263 million in 1948-49; and in an expected rise of output from 1947 to 1948-49 in bread grains of 33 per cent, in coal of 10 per cent, and in crude steel of almost 20 per cent. The budgetary situation was also to improve. In the Four-Year Plan (1949 to 1953) even larger gains were anticipated. The British were to raise their industrial and agricultural output by one-third over the pre-war level and to carry through an investment program out of their own resources of 20 per cent of GNP by 1952-53. By increasing proportionate purchases from non-dollar sources and exports, especially to dollar areas, by carefully scrutinising imports and reducing "other dollar and gold payments," and by introducing appropriate domestic policies directed to keeping consumption down and investments judiciously allocated, the government anticipated a balancing in its dollar accounts.¹⁹

In a brilliant article, Professor D. H. Robertson raises some interesting questions. In its planning, the government indeed avows its determination to maintain freedom; but nevertheless it sets up its priorities for uses of economic resources and does not mark out the dividing line

¹⁸ UK: *National Income and Expenditures of the United Kingdom*, Cmd. 7371, (1947), pp. 5, 12.

¹⁹ OEEC: *Report to ECA on the First Annual Programme*, 1st July, 1948-30 June, 1949, Part I, pp. 59-61; OEEC: *Interim Report of the European Recovery Program*, I, December, 1948, pp. 177-182; UK: *European Cooperation, Memorandum Submitted to the OEEC, 1949 to 1953*.

between controlled and free sectors. In a schizophrenic world, the public plumps for commercial housing, medical services, and milk; but in its private life, it plumps for beer, cinemas, and perpetual motion. Undoubtedly Professor Robertson, like other distinguished British economists, tends to overemphasize the contribution of wage policy and deficit financing to the adverse balance of trade; he also fails to take account of the *general* resource to inflationary wage and similar policies abroad (hence these balance to a considerable extent), and fails to allow adequately for the factors mentioned above for which the British are not primarily responsible.²⁰

France

France, embarrassed by a large deficit in her balance of payments and hampered by an unstable political situation, has had to cut back her investment program much more than the British. Her inflation problem is much more serious than that of the British, partly because of her unwillingness to use controls or her ineptness in enforcing them; and partly because of her unsatisfactory fiscal system. The French investment program greatly exceeds the amounts available from savings and foreign assistance, though a balance is promised in 1948. Although investments programmed under the Monnet Plan were supposed to have been reduced by 40 per cent, the French nevertheless were able to raise industrial output above pre-war; and output in important investment goods industries rose by more than 30 per cent from the first quarter of 1946 to the third quarter of 1947.²¹

The French international position is serious; and surprisingly so, in view of the fact that France has not suffered large losses on invisible account as did the United Kingdom. In part the explanation is the large inflation, not generally offset by an adequate decline in the external value of the franc, and especially the ambitious investment program and damage caused by war and whether.²² In the first quarter of 1947, the volume of French exports was 82, and of imports, 122 (1938 = 100). These should be compared with corresponding British figures of 106 and 77, the ratio of British exports to imports in 1947, relative to 1938, was about twice as favorable as that of the French. The estimated adverse balance for 1948-49 of the United Kingdom with all countries (other than the countries participating in the European Recovery Program) is

²⁰ D. H. Robertson: "The Economic Outlook," *Economic Journal* (December, 1947), especially, pp. 428-37.

²¹ *A Survey of the Economic Situation and Prospects of Europe*, pp. 1, 8.

²² It is interesting that the inflation is much more serious even though real wages are substantially down in France (and up in the United Kingdom). Cf. UN: *Survey of Current Inflationary and Deflationary Tendencies*, (1947), pp. 26, 43.

5 per cent of her national income in 1946, and for the French, 9 per cent. The French adverse balance in 1947 was from 5 to 7 times that of pre-war. It is clear that inflation, the crop failure of 1947, political strife, and the dollar crisis (all interrelated) substantially slowed up the progress under the first two years of the Monnet Plan. Continued progress rests upon an improvement in the political situation, fiscal and monetary reform, generous help under the ERP, and a reallocation of resources among investment, exports, and consumption.²³

In 1948, France continued to show improvement although on the stabilization front the economy still floundered. As has been noted, the government pruned the investment program in 1947, for the estimate of achievement was 84 per cent of the amount planned, and the program for the first half of 1948 was but 90 per cent of the target originally set under the Monnet Plan. For the four-year period, 1948-52, however, the government still adhered to an investment program calling for 20 per cent of gross national product, or 25 per cent of the net national income. To reach these lofty goals, the government would rely upon foreign aid to provide 25 per cent of the resources required for the investment program and would also use Treasury surpluses.

During four years, an increase of agricultural output of 25 per cent, of industrial output of 40 per cent, of electric power of 40 per cent, of the volume of exports by 75 per cent and a reduction of imports by 20 per cent, the settling of dollar debts with credits in other currencies—these would make possible a balancing of the international accounts and a rise in consumption standards. Indeed, heroic assumptions are made concerning the rise in output, in the changes in the structure of industry and of exports, and in the provision of markets.²⁴

Western Germany, Japan, and Greece

Another group of countries, i.e., Western Germany, Japan, and Greece, also failed to make adequate progress. These countries all suffered from occupation and became the economic wards of the United States. In 1947, their output was very low compared to pre-war, their

²³ Figures based on *A Survey of the Economic Situation and Prospects of Europe*; State Dept.; 1) *European Recovery Program Estimated Balance, Payments on Current Account of the Participating Countries, April 1, 1948—June 30, 1948*, p. 2; 2) *The European Recovery Program, Country Studies, France, 1947*, especially pp. 4-5, 20-2, 28-30; Senate Foreign Affairs Committee: *Hearings on the European Recovery Program*, III, p. 1005.

²⁴ See especially *The Economist*, September 1, 1948 and November 6, 1948; General Commission for the Modernization and Equipment Plan, *Second Half Yearly Report on the Achievements of the Modernization and Equipment Plan*, I, 1948, pp. 13, 75-83; *Report to the ECA on the First Annual Programme*, I, pp. 46-7; *Interim Report on the European Recovery Programme*, I, pp. 146-50.

inflation was still advancing, and their balance of payments was strikingly adverse. Failure to achieve recovery in Germany and Japan was unfortunate not alone for these countries but for a large part of Europe and Asia, respectively, which ordinarily depend on these countries for markets and purchases of essential products.

At the end of 1947, industrial production in Bizonia was still substantially less than 50 per cent of pre-war; and that of Japan, about one-quarter of 1937. The gains for Western Germany in 1947 were, however, large; for Japan, but a few per cent. Germany's exports in 1947 were estimated at \$426 million (\$309 million in 1946) and imports at \$900 million (\$750 million in 1946). Exports in dollars were about one-seventh of pre-war; and imports about 30 per cent. Exports were estimated to be but one-tenth the amount required for a normal wartime Germany economy. These figures suggest the larger advances that will have to be made before the German economy once more is on its own. In 1948, indeed, there was further progress.

The ERP proposes to integrate the German economy with Western Europe, and in particular to provide Western Germany with the food, raw materials, and equipment which will make it possible for her more nearly to attain her pre-war output and to make her substantially less dependent upon the United States. Actually, the allocation of about 9 per cent of total ERP funds for 1948-49 to Western Germany may not be adequate in the light of the ambitious program assumed for Germany. (Plans call for total foreign aid in Western Germany of \$1.2 billion in fiscal year 1949, as compared with \$782 million in 1948.)²⁵

An area that produced much less than 40 per cent of pre-war industrial output is expected now to raise output to 60 per cent of pre-war in 1948-49 and 100 per cent by 1951-52, and over a period of four years to increase output of machinery by 120 per cent, of steel goods by 200 per cent, and of textiles by 150 per cent. Bizonal Germany's exports to countries not participating in the ERP are scheduled to rise from \$170 million in 1948-49 to \$778 million in 1951-52; but nevertheless during these four years there will accumulate an adverse balance of payments of \$3,580 million. To achieve the large rise in output and the reduction in the adverse balance with these countries of but \$360 million over three years, Germany required a vigorous monetary reform (the amount of money was estimated at six times the pre-war amount though con-

²⁵ See especially *Final Report on Foreign Aid*, pp. 113-50; Hearings House Subcommittee on Appropriations on *Foreign Aid Appropriation Bill for 1949*, pp. 1-153; State Dept.: *The European Recovery Program, Country Studies, Western Germany*, (1947); *A Survey of the Economic Situation and Prospects of Europe*, pp. 40-3; J. K. Galbraith in S. E. Harris, (Ed.) *Foreign Economic Relations of the United States*, (Harvard University Press, 1948).

trolled prices were relatively unchanged), improved government and transportation, and more coal and consumers' goods.²⁶

By early 1949, Germany seems to have made a greater recovery than had been anticipated. Her exports in 1948 are estimated at one-half her imports, and exports for 1948-49 at three times the 1947 amount. In 1948-49, the program calls for a rise in the production of bread grains over 1947 of 13 per cent, of coal of 16 per cent, and of crude steel of 112 per cent. In four late months of 1948, the increase in industrial output was almost 50 per cent. By 1952, it is anticipated the gross national product will exceed that of 1936 and steel production will have reached the ceiling of 10.7 million tons set by the Allies. Despite an investment program of 19-22 per cent of gross national product over four years, the standard of living, however, will be but 85 per cent of the 1936 level; and despite the favoring of export industries, even in 1952 there will be a large deficit with North and Central America of \$250 million and with the sterling area of \$190 million.²⁷

In many respects the Japanese situation is more explosive than the German. Like Germany, Japan is dependent upon foreign countries for a large part of her imports of raw materials and food; but unlike Germany, she cannot count on an early restoration of her main markets. Before the war, Japan's major markets were in Asia; and her imports were primarily from Asia. Now she is almost wholly dependent on the United States for her imports. The reduced importance of silk, which accounted for about a quarter of her exports in the early thirties, as well as the increased industrialization abroad, which is bound to affect adversely her exports of textiles, ordinarily equivalent to more than half her exports—these enlarge the obstacles to Japan's recovery. Despite the warnings of the Japanese White Paper, the economic diseases it uncovered still prevail: in the thirteen months ending August, 1947, the index for family money outlays in Tokyo showed a further rise of 200 per cent; coal is still short; the control system is still largely ineffective; and the gaping deficit in the balance of payments continues. Army authorities may well be too optimistic in assuming that by 1953 the Japanese economy will be once more on an even keel. Even expenditures by the United States of \$2 billion over the next four to five years may not accomplish this miracle for eighty million people, with a population density of about 211 per square kilometer.

In order to achieve her goals, Japan had to increase industrial output about 40 per cent of pre-war by 1947 (the actual output was much less),

²⁶ Especially *Country Studies, Western Germany*, pp. 35-6, 50, and other passages.

²⁷ *The Economist*, January 15, 1949; *Report to ECA on the First Annual Program, 1948-1949*, pp. 62-3; *Interim Report on the European Recovery Program*, I, pp. 183-7.

and will have to increase output to about 140 by 1953. In 1947, output of steel was only 15 per cent of that of 1937, and output of coal only a little more than half. In comparison with \$500 million of imports and \$150 million of exports from September, 1945 to June, 1947, an annual balance of imports and exports at about \$1,500 million will be required by 1953, or about twice the *annual* exports and imports (dollars) of 1930-34. Both the general rise of exports and the increased machinery exports required in the plans of the occupation authorities will not be forthcoming unless the political situation in Asia improves substantially in the next few years. Increased rations, monetary stability, and a large rise in imports of essential foods, minerals, and raw materials will also be required. Japan suffers from other handicaps as well: the payment of reparations and occupation costs, the problem of dealing with the large monopolies, the excessive use of natural resources during the war, and the unwillingness of neighbors to trade with her. In short, the solution of the Japanese problem early in 1949 seems about as far off as it was in 1946, the year on which the White Paper was based.²⁸ A steady flow of new plans has not solved the problems of output, of consumption, of inflation, and of the gap in the balance of payments.^{28a}

The recovery of Greece also has been disappointing. Few of the problems raised by the UNRRA Report on Greece have been solved. Indeed, production has improved somewhat—e.g., by 1947 industrial output doubled from the low level of 1945, and some progress was made in reconstruction—though transportation is still far below pre-war. But production is far below targets; and despite \$750 million of aid from the liberation period to the end of 1946, the trade balance is still precarious. In 1946, imports were \$311 million and exports 'but \$40 million, the deficit being made up largely by \$198 million of UNRRA aid. The \$300 million of aid under the Authorization of May, 1947 plus the additional help under the ERP will help finance the adverse balance, which, on current account with countries not participating in the ERP, is estimated at \$214 million for 1948-49, or about 40 per cent of the current income of the country.

Recovery in Greece awaits an improvement in the political and military situation, an expansion of output and improvements in transportation, a rise in tobacco output, and a recovery of European markets, to be accelerated by proper monetary policy and revised exchange rates.

²⁸ For latest material on Japan, see *Final Report on Foreign Aid*, pp. 219-27, 247-66; UN: *Economic Report, 1945-47*, pp. 7, 69-89; *Foreign Aid Appropriation Bill for 1949*, II, pp. 158-257; Hearings House Committee on Foreign Affairs: *United States Foreign Policy for a Postwar Recovery Program*, II, pp. 2127-56; and R. W. Barnett in my *Foreign Economic Relations of the United States*.

^{28a} See *The Economist* (London), July 17, 1948 and January 15, 1949; *The Eastern Economist*, June 23, 1948; and the *Financial Times* (London), July 6, 1948.

Budgetary and monetary reforms are especially imperative. The United States Control Commission has already imposed a balanced budget, at least on paper (foreign aid provides 40 per cent of the budget receipts) and has improved somewhat the control system. But the currency problem is far from solved. The note circulation, virtually wiped out in 1944, was 10 times pre-war at the end of 1945 and 40 times at the end of 1946; by the end of 1946, the price level was 150 times the pre-war level—this was the second round of inflation—and the external value of the drachma was down from 150 = 1 dollar in early 1944 to 8,500 late in 1947. Strong measures by the Control Commission and the ERP, as well as other aid, seem to promise continued improvement. But the fundamental agricultural reforms (inclusive of irrigation and hydro-electric development), industrialization, substitution of domestic output for imports (e.g., coal), recapture of foreign markets, political stability, and elimination of unproductive middlemen and government pensioners seem a long way off.²⁰ The Progress made in reconstruction and in monetary reform has been significant, though inadequate. In 1948, there was a substantial rise in output; but inflation continued as a threat. Even by 1952, the problem of the balance of payments would continue to be troublesome; and the ambitious program of the FAO still seemed largely in the dreamers' stage.^{20 a}

Czechoslovakia, Hungary, and Poland

In order to save space, we shall comment but briefly on other countries. In many respects, the results are similar, all countries suffering from dollar shortage.

In this volume we presented the most important parts of the 1946 Two-Year Plan of Czechoslovakia, the Three-Year Plan of Poland, and the 1947 Three-Year Plan of Hungary. As has been noted, Yugoslavia in 1947 adopted a Five-Year Plan. These countries all embarked on large investment and nationalization programs and broke up large landed estates. In their trade, they looked increasingly toward Moscow, especially once United States credits were excluded; but the U.S.S.R. could not satisfactorily fill the gap left by the deterioration of economic relations with the West.

In Poland the accomplishments in the industrial sector in the first

²⁰ Especially State Dept.: *The European Recovery Program, Country Studies, Greece*, pp. 1-27; also see *Final Report on Foreign Aid*, pp. 190-208; UN: *Economic Report, 1945-47*, ch. 6; Hearings House Committee on Foreign Affairs: *United States Foreign Policy for a Post-War Recovery Program*, II, pp. 2011-47, especially, pp. 2043-46.

^{20 a} [MF: *Financial News Survey*, December 9, 1948, p. 191; and OEEC: *Interim Report on the European Recovery Program*, pp. 48-9.

half of 1947 checked reasonably well with the goals set. Planning was largely concentrated on this segment of the economy. Unfortunately, crop failures brought serious setbacks in agriculture. In a revised plan of the middle of 1947, it was found necessary to reduce investment and to raise consumption: the Poles had overestimated foreign aid and underestimated the relation of consumption and productivity.³⁰

During 1946 and 1947, economic conditions in Czechoslovakia, Hungary, and Poland improved, though with interstices of declines. The rise in industrial output for the first to the fourth quarter of 1946, and from the latter to the third quarter of 1947 was as follows (in per cent): Czechoslovakia, 24 and 7; Poland, 27 and 16. Like other European countries, both those with advanced planning and others, these countries suffered a setback in the middle of 1947. As might be expected in the advanced planning economies, investment gained more than other activities. Thus Poland's production in major investment goods industries rose by more than 100 per cent from the first quarter of 1946 to the last quarter of 1947, while the rise for ten European countries was only 40 per cent. In agricultural output, the Eastern countries lagged: output for Czechoslovakia, Hungary, and Poland was but 73, 55, and 45, respectively, in 1946-47 relative to 1935-38. (For a large part of Europe, the total index was 75—allowance should be made for losses of territory.) Favored by large imports and losses of population, Czechoslovakia and Poland in 1946-47 had 11 and 6 per cent more commodities available for home use per head of the population than in 1938, and this despite low productivity. The average for fourteen countries was 83.

Undoubtedly, the most unfortunate development for these countries was in their foreign trade. Despite agreements with the USSR, the cutting off of Western funds required readjustment of plans and in particular a pruning of investments. Whereas from 1938 to 1947 Western Europe (exclusive of the USSR) increased the dollar value of its exports by 39 per cent and of its imports by 73 per cent, other Central and Eastern European countries (exclusive of Germany and the USSR) experienced a decline of exports by 30 per cent and a rise of imports of but 22 per cent. In volume, Czechoslovakia's imports in 1947 (nine-month average and exclusive of UNRRA shipments) were but 82 and exports 50 (1938 = 100), and for Hungary, all exports and imports 48 and 25, respectively. Large reparations further weakened the economic position of some Central and Eastern European countries. With credits of Western countries virtually exhausted in 1948, Eastern countries will have to effect even larger readjustments. One of the most difficult problems facing these countries is the extent to which their economies are to be integrated with that of the USSR. Are they to be com-

³⁰ Especially Paul Sweezy: *Socialism*, Ch. 4 (McGraw-Hill, 1949).

plementary to, or competitive with, the USSR? Poland, Hungary, and Yugoslavia require from Czechoslovakia and the USSR imports, formerly obtained from Germany; and some of the Eastern countries require substitutes for German markets.³¹

Since this was written, these governments have released more recent information. In line with closer ties to the USSR, Poland increasingly resorts to nationalization, attacks on the rich peasants, compulsory savings, price controls, and the like. The country apparently reached its 1947 goals, though with varying success in different areas. By 1949, the rise in nation income required is more than double that of 1946; and the targets for 1947 seem to be at about one-third of the way toward the 1949 goals. In Czechoslovakia, the government reports from January, 1947, the first month of the Two-Year Plan, to May, 1948, a rise of industrial output (exclusive of food processing) of 38.1 per cent, of employment of 10.2 per cent, and of productivity of 25.3 per cent. In Czechoslovakia, the country also proceeds to nationalize, the wholesale trade being taken over in 1948.³²

India

Brief comments are in order for India, the Argentine, and the United States. The famous Bombay Plan was useful largely in that it stimulated the government to produce plans of its own. Little progress has been made so far. Total costs of proposed Central and Provincial Five-Year Plans were to be 13 billion rupees, or about \$4 billion, of which the central government would provide about 10 billion rupees. These plans are much more modest than those of the Bombay industrialists; both the political division of India and the unavailability of foreign capital, aggravated by the blocking of pound sterling, influenced the Plans. According to releases of the Government of India Information Services, the government early in 1947 embarked on an Indian TVA, and also announced the government's interest in control and development of designated key industries and in industrialization; and it promised a reexamination of the problem of nationalization in ten years.³³

The reader will find a discussion of more recent plans (1946) of

³¹ Figures from *A Survey of the Economic Situation and Prospects of Europe*, especially pp. 1-44; also see *Final Report on Foreign Aid*, pp. 353-427; UN: *Economic Development in Selected Countries*, (1947), pp. 197-236.

³² U.S. Department of Commerce: *Poland, Summary of Economic Conditions*, May, 1948, pp. 1-12; IMF: *Financial News Survey*, August 19, 1948, p. 59; *The Financial Times* (London), August 24, 1948.

³³ UN: *Economic Development in Selected Countries*, pp. 151-82; and Government of India Information Services: *Releases No. 3593, 3659, 3660, 3667, 3371*, (December, 1947-April, 1948).

Provincial Governments and the Central Government of India in United Nations: *Economic Development in Selected Countries*.³⁴ Aside from the 1945 addition to the Bombay Plan (on Distribution and State Control), the United Nations volume presents details of the Provincial and Central Government Five-Year Plans. It will be noted that the amount involved (\$4+ billion) is not much different from the \$4.2 billion given in ¶ 94 for the first five years under the Bombay Plan. Unfortunately, however, prices were much higher by 1946 than in 1939, the price level assumed in the Bombay Plan. In 1948, Mr. Birla, one of the signatories of the Bombay Plan estimated total investments for the next five years in the *new* Dominion of India at \$3.7 billion, of which 62 per cent would be on government account. This amount, when adjusted for a rise in prices of roughly 200 per cent, was less than one-third the amount suggested in the Bombay Plan. Investments would fall to but 4.6 per cent of income.³⁵

With the division of the Sub-Continent of India into Pakistan and India, further revisions were required. The latter accounts for $\frac{1}{3}$ - $\frac{1}{4}$ of the population and area and for the more fertile lands.

The Argentine

The Argentine's Plan is still far from fulfillment. In 1947, employment in industry was still but 14 per cent in excess of 1943 and but 5 per cent above 1946. Serious shortages of dollars, evident in large losses of reserves, forced Latin American countries generally to moderate their investment and import programs.³⁶ Nor were there significant improvements in the first half of 1948.

The United States

In 1947 and 1948, *the* problem in the United States was inflation, and not, as was *adumbrated* in at least one of the reports of the Council of Economic Advisers, inadequate demand. Indeed, the January, 1948 report of the President dwelt on long-range objectives: development of natural and human resources, increased productivity, and the support of institutions favoring a high production economy. But inflation was the important immediate problem. Continued expenditures for foreign assistance and rearmament, in turn contributing to continued high levels of investments and consumption, are the inflationary factors in the situation; and as long as they continue, the country need not worry

³⁴ October, 1947, pp. 150-52.

³⁵ IMF: *International Financial Notes*, June 24, 1948, pp. 36-7.

³⁶ *Economic Report, 1945-47*, pp. 50-7; *Economic Development in Selected Countries*, pp. 18-48; *Final Report on Foreign Aid*, pp. 445-64.

over deficient demand. The President sensed the dangers and proposed adequate measures; but neither the Joint Economic Council nor the Congress was compliant.³⁷ As we noted in Chapter IX, the President and Council were specific in January, 1949, on the twin objectives of stabilization and equity—and proposed long run programs.

Norway and the Netherlands

Unable to obtain required imports, Norway also had to reduce its investment program, as outlined in its plan for 1947. Nevertheless, the government is pushing ahead on an ambitious program. In May, 1947, total industrial production stood at 122 per cent (1938 = 100); and in the first half of 1947, output of capital goods at 123, and of consumer goods at 122; but output of export goods stood at only 79. From a disinvestment of 3.1 per cent of national income in 1945, investment rose to 24.7 per cent in 1947, and is estimated at 17.9 per cent in 1948.³⁸ Despite the inflated supply of money—616 per cent of pre-war—the cost of living on July 31, 1947 was but 61 per cent, and wholesale prices 79 per cent above the 1938 average. Despite substantial budgetary deficits, the government was able to keep inflation under control by a monetary freeze and by widespread use of effective controls, inclusive of wages. With adequate consumers' goods, with large parts of the excess money in the possession of business, and with excesses being siphoned off by the government, suppressed inflation did not interfere seriously with incentives. Pressure to recoup losses in investment activity in part accounts for the continued deficit in the balance of payments and the need for ERP aid.³⁹

In many respects, the problems of the Netherlands are similar to those of Norway; but on the whole they are more intractable. In the pre-war, the Netherlands depended largely on foreign investments, earnings from the Netherlands East Indies (NEI), and shipping and entrepot trade to cover an excess of imports over exports of \$200 million, or one-third the value of exports. Now these invisible earnings are largely gone; and the Netherlands faces a deficit of \$795 million in 1947, and, with all countries not participating in the ERP, a deficit of

³⁷ *The Economic Report of the President* (January, 1948), pp. 46-52; *Joint Economic Report: Report of the Joint Committee on the January 1948 Economic Report of the President*, (May 1948), especially pp. 2-10; and my statement before Senate Banking and Currency Hearings on *National Stabilization*, (1948), II, pp. 575-81.

³⁸ International Monetary Fund: *International Financial Notes* (June 3, 1948), p. 11.

³⁹ Especially, State Dept.: *The European Recovery Program: Country Studies, Norway*, especially, pp. 1-31.

\$2.8 billion over four and a half years ending June 30, 1952. The large investment program calling for \$1.9 billion of expenditures over three years is largely oriented toward building up shipping income and replacing goods previously imported with domestic output, and to stimulating new export industries. These are large deficits and investments for a country with an income of about \$4 billion in 1946. For 1947, investments estimated at close to \$1 billion should exceed 20 per cent of income, and the average annual deficit in the balance of payments over four years, about 15 per cent of 1946 income. As a result of damage in the war, the loss of the German and NEI markets, the warfare in the NEI, and other adverse factors, output, and especially consumption, in 1947 were far below pre-war. Only stringent tax and distributive measures enabled the country to get on without much trouble. The disappointments in 1947 were due especially to warfare in the NEI, the slowness of European recovery, and, of course, dollar shortage.⁴⁰

Norway showed further progress in 1948 although the adverse balance of payments remained large and the planners had underestimated imports and overestimated housing expenditures. Relying upon a rise of national income of 15-20 per cent above 1948 by 1952-53, and a net investment program requiring 24 per cent of the net national income, the planners hoped to raise the standard of living to the pre-war level and largely to eliminate the dollar deficit. The Netherlands also expects an improvement in its balance of payments, in 1948-49 especially from a large rise in exports and a reduced dependence on dollar markets for imports. Production would rise greatly in the next four years, and the standard of living would equal that of pre-war.⁴¹

Planning on an International Scale

As a result of the ERP, the OEEC (Organization for European Economic Cooperation) countries (the 16 participating countries and Western Germany) joined their planning effort. Each country presented a plan in the latter part of 1948 for the four years ending 1952-53; and the OEEC in turn reviewed these plans for internal consistency.⁴² (We have used some material from these plans earlier in this chapter.)

⁴⁰ Especially *The European Recovery Program: Country Studies, The Netherlands*, pp. 1-33.

⁴¹ *Report to ECA on the First Annual Programme*, pp. 52-5; *Interim Report on the European Recovery Program*, I, pp. 138-41, 161-5; L. R. Klein, "Planned Economy in Norway," *American Economic Review*, December, 1948, pp. 795-814.

⁴² OEEC: *Interim Report on the European Recovery Program*, I, December 30, 1948; also see UK: *European Co-operation: Memorandum Submitted to the OEEC Relating to Economic Affairs in the Period 1949 to 1953*, Cmd. 7572, December, 1948.

According to the plans of the individual countries, the gross national output in 1952-53 would be 20 per cent higher than in 1938 and 35 per cent above that of 1947. Whereas the normal expansion of industrial and agricultural output was 3 per cent per annum, the composite plans call for a rise of 7 per cent per annum. Unfortunately, the OEEC does not share this optimism. This outcome depends upon a large volume of investment; upon a rise in man-hour output of 15 per cent; upon the availability of the required supplies of raw materials; upon the capacity of Western Europe to finance the large excess of imports contemplated; upon (related) the success with which an excess of "soft" currencies can be converted into dollars; upon (related) the capacity of Western Europe to make substantial relative gains in world trade; upon (related) their success in squeezing the United States manufacturer out of markets both in the United States and elsewhere; and upon the achievement of sound monetary and fiscal policies.

Impressed by internal inconsistencies of the plans (e.g., excessive capacity in oil refining, more exports than imports in intra-European trade), by the likely difficulties of obtaining raw materials, *inter alia*, the OEEC was less sanguine than the planners of each country: the rise of output would be substantially less than suggested. Even in 1952-53, the standard of living would be significantly lower than in 1938, and a disequilibrium in the dollar market would still prevail. Heroic measures for producing goods in Europe that might otherwise be imported from overseas, for strengthening intra-European trade ties, for raiding the markets of the United States, for developing the overseas territories, for meshing the various economies—these and other policies might help bring about the end results suggested by the participating countries.

Conclusion

This survey of recent history suggests that plans, even well conceived, may easily be upset by untoward economic or political developments, or merely by bad weather. Frequently the goals set by the planners in 1944-47 have not been reached in the years 1946-48. One explanation, and perhaps the most important one, is the deterioration of political conditions, which accounts largely for the reduced amounts of foreign credit available to *many* countries and hence in part for the annoying deficits in the balance of payments and the failure to carry through ambitious investment programs. Inflation and curtailed output generally also stem partly from the unsatisfactory political and military situation.

Yet it would be a mistake to blame untoward developments, inclusive of the bad crops of 1947, exclusively for the disappointments. A second factor is certainly the quality of the plans. In some countries, planning is in a primitive stage: clearly where the government does not take re-

sponsibility for the allocation of resources and the distribution of the output, planning is not in an advanced stage; and hence the government's responsibilities are limited. In many countries, planning amounts to little more than a blueprint of objectives and suggested legislation. In others (e.g., the United Kingdom), the government is prepared to offset fluctuations in the private economy and to assume limited control of the movements of economic factors. Planning in the United States does not even go this far. In countries indulging in comprehensive and advanced planning, the government should more properly be held accountable for failure to reach goals. But irrespective of the degree of planning, many of the current difficulties originate in bad blueprints—as might be expected in view of the present state of planning. Planners have often failed to integrate plans with those of other countries; to reconcile investment and consumption objectives; to fit these into the patterns for international equilibrium; and to relate wage, price, and exchange policies to the programs for allocation of resources and international equilibrium.